



CITY OF CARDIFF.

ANNUAL REPORT

FOR 1920

OF THE

MEDICAL OFFICER OF HEALTH.

EDWARD WALFORD, M.D., D.P.H., F.R.MET.SOC.,

MEDICAL OFFICER OF HEALTH, CITY AND PORT OF CARDIFF;
SCHOOL MEDICAL OFFICER, CARDIFF EDUCATION AUTHORITY.

Printed by Order of the Urban Sanitary Authority.

CARDIFF :

S. GLOSSOP AND SONS, LTD., NEW STREET.

1921.

CITY OF CARDIFF.

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* Cert. Royal San. Inst.

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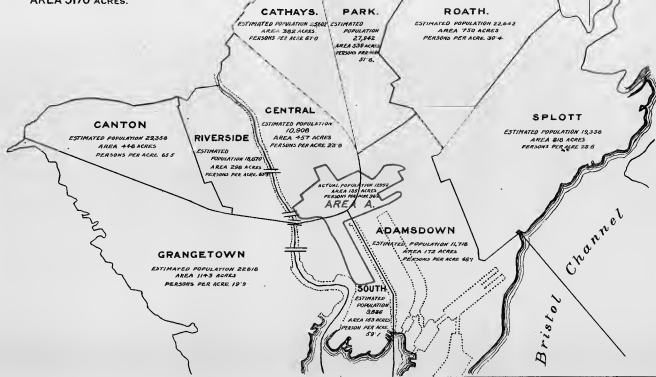
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City of Cardiff.

ESTIMATED POPULATION 212,582.
(REGISTRAR GENERALS ESTIMATE FOR THE YEAR 1920.)
AREA 5170 ACRES.



Vital Statistics for the Year 1920.

City of Cardiff.	Birth Rate	Death Rate	Infant Mortality	Pulmonary Tuberculosis	Diarrhoea and Enteritis	Bronchitis and Pneumonia
Whole of City	24.1	11.3	84	1.23	0.19	1.88
Central Ward	26.0	18.9	116	2.65	0.45	2.47
South Ward	29.6	25.3	146	4.87	0.31	4.04
Cathays Ward	23.9	10.0	55	0.85	0.15	1.28
Adamsdown Ward	30.3	14.9	87	1.62	0.24	3.41
Riverside Ward	20.9	11.4	78	0.84	0.15	1.69
Canton Ward	25.0	9.8	79	0.95	0.20	1.70
Grangetown Ward	35.4	13.3	85	1.22	0.17	2.14
Roath Ward	21.8	9.5	76	0.91	0.13	1.57
Park Ward	18.2	9.4	78	1.00	0.14	1.82
Sploott Ward	33.6	12.2	84	1.24	0.31	2.22

AREA A.

Population	Birth Rate	Death Rate	Infant Mortality	Pulmonary Tuberculosis	Diarrhoea and Enteritis	Bronchitis and Pneumonia
12,992	31.7	24.2	128	4.69	0.61	3.92

Number of tenements of 4 rooms and under with more than 2 persons per room=53.

CITY OF CARDIFF.

CITY HALL,

CARDIFF,

May, 1921.

*To the Right Honourable The Lord Mayor, Aldermen and Members
of the City Council of Cardiff.*

MY LORD MAYOR AND GENTLEMEN,

I have the honour of submitting to you my Thirty-third Annual Report on the health of the City of Cardiff, including an account of the administrative work carried out in the department of the Medical Officer of Health, during the year 1920. Deficient housing accommodation is still the most pressing evil with which the community has to contend. The result is persistent overcrowding, especially in the smaller houses in the town. It is impossible for the Health Department to deal with this condition in any satisfactory way owing to the shortage of houses. Further and improved housing accommodation is an urgent necessity; when this has been accomplished the question of the closure and demolition of some of the most unsatisfactory and dilapidated dwellings will have to be seriously considered.

In my Annual Report for 1919, I enumerated some small courts which might be dealt with in this way in the near future, and referred to the congested central area marked A on the Map.

For convenience this Map has been reproduced in this Report with revised mortality rates calculated on the latest estimate of the population.

On comparing the figures contained in this Map with the mortality rates in the several Municipal Wards as shown in the Tables attached to this Report, it will be seen that the highest rates occur in the Central and South Wards, in which the greater part of the Area A is situate. Cardiff is, for the most part, of modern construction, and no large area could be designated as a slum or unhealthy area, but Area A is a congested district, in which the housing arrangements are more or less unsatisfactory, and in which a comparatively low state of health prevails. It would seem desirable to deal, in the first instance, with the small Courts referred to by schemes under Part II. of the Housing Act of 1890, but to carry out such schemes gradually and in accordance with the rate at which new houses are provided.

Upon the completion of this work of clearance, consideration should be given to the larger question involved in dealing with the Area marked A.

The attached summary of the vital statistics for the year shows that the decline in the birth-rate, so continuous during the last twenty years, has received a check and the improved rate of 24.1 per 1,000 was arrived at for the year 1920. The actual number of births registered being 5,135, the highest figure since the year 1900.

The death-rate 11.3 per 1,000 is the lowest on record. The rate of Infant Mortality, 84, was also exceedingly low.

The City Council, through its Housing Committee, has prepared Housing Schemes under Part III. of the Housing of the Working Classes Act, 1890, and Section I. of the Housing and Town Planning Act, 1919, and a Town Planning Scheme is now under consideration.

Particulars of these Schemes are set forth below :—

IN THE CITY OF CARDIFF.

	No. of Schemes submitted	No. of Schemes approved	Area	No. of Houses completed	No. of Houses in course of construction	No. of Rooms per house
Eldon St.(completed)...	1	1	5,132 sq. yards	21	...	5 (including Scullery)
Halsbury Road ...	2	2	4,484 sq. yards	8	4	6 (including Scullery)

OUTSIDE THE CITY.

Mynachdy	1	1	85½ acres	42	672	6 (including Scullery)
Ely	1	1	450 acres	None	40	

The necessary steps are now being taken to extend the City boundaries by the inclusion of some of the adjoining districts, the main object, from a health point of view, being to spread the City over a much larger area, and to thin out or clear away the more congested and central districts, under the powers given by the Housing Acts.

Owing to the uncertainty attaching to the estimates of population during the War, it has been impossible to calculate the density of the population (or persons per acre) during this period upon any satisfactory basis. For the years 1919 and 1920, this density became approximately 33 persons per acre, calculated on the revised estimate of the population.

TABLE I.

The following Table shows the density of the population in the City since 1905 :—

Year.	Persons per acre.				
1905	26.9
1906	27.2
1907	27.5
1908	27.8
1909	28.1
1910	28.4
1911	28.6
1912	28.9
1913	29.2
1914	29.5
1919	33.4
1920	33.3

VITAL STATISTICS :—The following is a Summary of the Vital Statistics for the year 1920. The civilian population, upon which the calculation of the death rates is based, is estimated by the Registrar General as 212,582 for the middle of 1920, or 8,146 in excess of the estimate for 1919, and the birth rate is based on an estimated population of 212,858.

Births	5,135	Birth-rate per 1,000 ...	24.1
Deaths	2,411	Death-rate per 1,000 ...	11.3
Deaths from Zymotic Diseases	173	Zymotic death-rate per 1,000	0.81
Deaths under 1 year ...	431	Deaths under 1 year per 1,000 births	84

TABLE II.

Table showing the number of deaths and death-rates per 1,000 from Zymotic, Respiratory, and Tuberculous Diseases during the year 1920, compared with the average annual death-rates from these diseases during the preceding ten years :—

Cause of Death	Number of Deaths	Death-rate per 1,000	Death-rate per 1,000, 1910-1919 (average)
Small-pox ... ..	...	...	0-00
Measles	63	0-29	0-24
Scarlet Fever	18	0-08	0-07
Diphtheria	23	0-10	0-16
Enteric Fever	5	0-02	0-03
Whooping Cough	22	0-10	0-20
Respiratory Diseases	400	1-88	2-26
Pulmonary Tuberculosis	262	1-23	1-34
Other Tuberculous Diseases	50	0-23	0-39

TABLE III.

Table showing the birth-rate and death-rate per 1,000 persons living, and rate of infant mortality in 1920, compared with the rates in 1919, the average rates for the ten years 1910-1919 in Cardiff, and the rates during the year 1920 in England and Wales and the 96 great towns :—

	Period	Birth-rate	Death-rate	Deaths under one year per 1,000 births
Cardiff	1920	24-1	11-3	84
Cardiff	1919	18-1	12-9	94
Cardiff	1910-1919	23-0	14-0	107
England and Wales	1920	25-4	12-4	80
96 Great Towns	1920	26-2	12-5	85

The following Table gives the population of Cardiff according to the census returns since 1801.

The increase shown between 1871 and 1881 was, in part, due to the extension of the boundaries of the Borough, and the inclusion of the districts of Roath and Canton in the year 1875.

TABLE IV.

Year.	Census Population.
1801	1,870
1811	2,457
1821	3,521
1831	6,187
1841	10,077
1851	18,351
1861	32,954
1871	39,536
1881	82,761
1891	128,915
1901	164,333
1911	182,259

TABLE V.

Estimated population on the basis of inhabited houses.

Average per house, 1912 to 1914=5.8							
" " " 1915 to 1920=6.0							
Year	Inhabited Houses.						Population.
1912	31,694	...	...	183,825
1913	32,164	...	...	186,551
1914	32,306	...	...	187,374
1915	32,854	...	...	197,124
1916	33,048	...	...	198,288
1917	33,172	...	...	199,032
1918	33,172	...	...	199,032
1919	33,172	...	...	199,032
1920	33,172	...	...	199,032

TABLE VI.

BIRTHS AND DEATHS IN CARDIFF, 1912 to 1920.

Year.				Births			Deaths	Excess of Births over Deaths	
1912	...	...	...	4,597	...	2,563	...	2,034
1913	...	...	...	4,900	...	2,567	...	2,333
1914	...	...	...	4,783	...	2,644	...	2,139
1915	...	...	...	4,645	...	2,808	...	1,837
1916	...	...	...	4,375	...	2,546	...	1,829
1917	...	...	...	3,635	...	2,433	...	1,202
1918	...	...	...	3,729	...	3,188	...	541
1919	...	...	...	3,869	...	2,652	...	1,217
1920	...	...	...	5,135	...	2,411	...	2,724
TOTALS ...				39,668	...	23,812	...	15,856	

TABLE VII.

DEATH-RATE, BIRTH-RATE, and INFANT MORTALITY, 1912 to 1920.

Year.				Death-rate.	Infant Mortality.		Birth-rate.	
1912	13.9	...	110	...	24.9
1913	13.7	...	115	...	26.2
1914	14.0	...	109	...	25.3
1915	14.8	...	106	...	24.6
1916	13.7	...	89	...	23.3
1917	13.4	...	99	...	18.5
1918	18.1	...	102	...	18.9
1919	12.9	...	94	...	18.1
1920	11.3	...	84	...	24.1

MARRIAGES.—The return of the number of marriages in the City of Cardiff during the years 1904–1920, with the rate of persons married per 1,000 of the population, is given below :—

TABLE VIII.

YEAR.	MARRIAGES.	RATE OF PERSONS MARRIED PER 1,000 living
1904	1,563	17·7
1905	1,650	18·8
1906	1,769	19·2
1907	1,743	18·5
1908	1,759	18·3
1909	1,803	18·4
1910	1,728	17·3
1911	1,646	18·0
1912	1,938	20·9
1913	1,976	21·1
1914	2,225	23·6
1915	2,401	25·4
1916	1,825	19·7
1917	1,710	18·9
1918	1,796	18·2
1919	2,892	27·1
1920	2,743	25·7

BIRTHS.—During the year 1920, the births registered in the City, numbered 5,259 ; of these 2,654 were males, and 2,605 were females. Deducting the outward transfers, and adding the inward transfers, as supplied by the Registrar General, the net total is as follows :—Males, 2,585, females, 2,550, total 5,135, corresponding to an annual birth rate of 24·1 per 1,000 persons living. During the ten years ended 1891, the birth rate in Cardiff averaged 39·9 per 1,000, as compared with 23·0, the average rate during the years 1910–1920. The following Table gives the annual number and the birth-rates in Cardiff in periods since 1852, from which it will be seen that a considerable decline in this rate has taken place during recent years.

TABLE IX.

Period.	Number of Births.				Birth-rate per 1,000.	
1852–1861	...	1,144	44·2	Average
1862–1871	...	1,364	...	...	37·7
1872–1881	...	2,433	...	...	36·5
1882–1891	...	4,166	...	...	39·9
1892–1901	...	5,241	...	...	35·3
1902–1911	...	5,049	28·9	Average
1912	...	4,597	...	...	24·9
1913	...	4,900	...	...	26·2
1914	...	4,783	...	...	25·3
1915	...	4,645	...	...	24·6
1916	...	4,375	...	...	23·6
1917	...	3,635	...	...	18·5
1918	...	3,729	...	...	18·9
1919	...	3,869	...	...	18·1
1920	...	5,135	...	...	24·1

TABLE X.

Showing the number of legitimate and illegitimate births, male and female, in each municipal ward during the year 1920 :—

Municipal Wards.	Legitimate.		Illegitimate.		Totals.		TOTALS.
	Males.	Females.	Males.	Females.	Males.	Females.	
Central	126	135	10	13	136	148	284
South	136	138	5	7	141	145	286
Cathays	327	271	4	10	331	281	612
Adamsdown	162	175	9	10	171	185	356
Riverside	188	192	7	8	195	200	395
Canton	336	368	14	16	350	384	734
Grangetown	379	402	10	17	389	419	808
Roath	259	224	9	7	268	231	499
Park	255	246	10	...	265	246	511
Splott	332	308	7	3	339	311	650
Totals	2,500	2,459	85	91	2,585	2,550	5,135

DEATHS.—The total number of deaths registered at all ages and from all causes in the City of Cardiff during the year 1920 amounted to 2,551, including non-residents who died within the district. If corrected by the subtraction of the Military and non-residents who died in public institutions in Cardiff, and by the addition of residents who died in institutions outside the City, the number is 2,411, corresponding to an annual death-rate of 11·3.

From Table XI. it will be seen that a continuous decline in the death-rate has taken place since these rates were first recorded in 1852–1861, when the mean rate for the ten years reached 29·2 per 1,000.

The death-rate throughout the country as compared with that of Cardiff for the year 1920 is given below :—

	Death-rate per 1,000 persons living.	
England and Wales	12·4
96 Great Towns	12·5
148 Smaller Towns	11·3
CARDIFF	11·3

TABLE XI.

The following table gives the vital statistics in periods since 1852, and shows the marked decline in the general death-rate, in the death-rate from zymotic diseases, and in the birth-rate in successive periods :—

Years	Population	Births	Birth-rate per 1,000	Deaths	Death-rate per 1,000	Deaths from Zymotic Diseases	Zymotic Death-rate per 1,000
1852—1861	25,889	1,144	44·2	756	29·2	222	8·58
1862—1871	36,152	1,364	37·7	875	24·2	167	4·62
1872—1881	66,639	2,433	36·5	1,335	20·0	218	3·27
1882—1891	104,420	4,166	39·9	2,255	21·6	347	3·32
1892—1901	148,606	5,241	35·3	2,674	18·0	355	2·39
1902—1911	174,490	5,049	28·9	2,597	14·8	286	1·63
1912	184,633	4,597	24·9	2,563	13·9	362	1·96
1913	186,554	4,900	26·2	2,567	13·7	258	1·38
1914	188,495	4,783	25·3	2,644	14·0	314	1·66
1915	188,495	4,645	24·6	2,808	14·8	233	1·23
1916	184,900 (City- II)	4,375	23·6	2,546	13·7	171	0·92
1917	180,341 (do.)	3,635	18·5	2,433	13·4	139	0·77
1918	175,587 (do.)	3,729	18·9	3,188	18·1	222	1·26
1919	204,436 (do.)	3,869	18·1	2,652	12·9	156	0·76
1920	212,582 (do.)	5,135	24·1	2,411	11·3	173	0·81

TABLE XII.

Showing the number of deaths and death-rates at various age periods during the last six years :—

AGES.	Number of Deaths.						Death-rate per 1,000 persons living at each age group.					
	1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Under 5 years	742	582	521	713	536	598	35.6	27.9	25.8	34.2	23.7	25.4
5 to 15 „	130	111	90	162	116	98	3.2	2.8	2.3	4.1	2.7	2.2
15 „ 25 „	142	153	174	304	195	156	3.9	4.2	4.9	8.4	4.9	3.8
25 „ 65 „	1,060	979	983	1,365	1,097	978	12.4	11.5	11.9	16.0	11.9	10.2
65 years and upwards ...	734	721	665	644	708	581	101.9	100.1	95.5	89.4	90.6	71.5
At all Ages ...	2,808	2,546	2,433	3,188	2,652	2,411	14.8	13.7	13.4	18.1	12.9	11.3

TABLE XIII.

Death-rates from all causes per 1,000 persons living in the several municipal wards, the highest rate in each year being underlined :—

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Cardiff (Whole District) ...	14.1	13.9	13.7	14.0	14.8	13.7	13.4	18.1	12.9	11.3
Roath Ward ...	13.0	12.8	9.5	10.4	12.3	11.1	9.6	13.3	12.0	9.5
Park Ward ...	12.4	11.9	10.8	11.7	12.5	11.1	11.9	14.8	11.4	9.4
Splott „ ...	12.9	14.0	14.2	17.8	14.1	10.3	11.0	16.1	11.6	12.2
Central „ ...	<u>22.1</u>	<u>21.0</u>	19.4	<u>22.9</u>	<u>21.8</u>	22.4	18.3	<u>23.8</u>	20.4	<u>18.9</u>
South „ ...	<u>21.4</u>	<u>19.1</u>	<u>21.2</u>	<u>22.6</u>	<u>17.9</u>	<u>23.9</u>	<u>23.8</u>	<u>29.9</u>	<u>24.6</u>	<u>25.3</u>
Cathays „ ...	12.3	12.6	<u>13.3</u>	10.9	13.4	<u>11.4</u>	<u>11.8</u>	<u>13.9</u>	<u>12.3</u>	<u>10.0</u>
Adamsdown Ward ...	16.3	16.3	16.6	15.7	18.0	16.9	13.8	18.4	15.2	14.9
Riverside „ ...	12.6	10.6	12.1	11.5	13.9	12.8	12.3	<u>13.3</u>	13.8	11.4
Canton „ ...	12.7	12.9	12.0	12.9	12.8	10.8	10.8	<u>14.0</u>	<u>14.0</u>	9.8
Grangetown „ ...	14.2	15.6	15.3	13.8	15.7	13.3	11.6	18.4	13.0	13.3

INFECTIOUS DISEASES.—The 2,411 deaths from all causes included 173 from the principal infectious diseases. This number was equal to an inclusive death-rate from these diseases of 0·81 per 1,000 persons living, as compared with 0·76 the rate in 1919, and with 1·28 the average rate for the ten years 1910–1919.

The mortality from these diseases in Cardiff was distributed in each quarter of the year 1920 as follows :—

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
Measles ...	38	25	—	—
Scarlet Fever ...	8	3	3	4
Diphtheria ...	9	7	2	5
Enteric Fever ...	2	1	1	1
Whooping Cough ...	11	6	1	4
Diarrhoea ...	3	6	9	24

In the Registration Sub-Districts, the mortality during 1920 from these diseases was as follows :—

	No. of Deaths	Death-rate per 1,000.
East Cardiff ...	42	0·59
Central „ ...	65	1·12
West „ ...	66	0·92

TABLE XV.

Death-rates from the principal Infectious Diseases per 1,000 persons living in Cardiff :—

	1913	1914	1915	1916	1917	1918	1919	1920
Small-pox ...	0·00	0·00	0·00	0·01	0·00	0·00	0·00	0·00
Measles ...	0·05	0·32	0·19	0·10	0·07	0·42	0·00	0·29
Scarlet Fever ...	0·09	0·10	0·05	0·03	0·01	0·02	0·20	0·08
Diphtheria ...	0·22	0·22	0·23	0·18	0·10	0·15	0·07	0·10
Whooping Cough ...	0·09	0·38	0·18	0·15	0·24	0·15	0·17	0·10
Enteric Fever ...	0·03	0·06	0·01	0·02	0·02	0·04	0·01	0·02
Diarrhoea ...	0·89	0·56	0·55	0·40	0·30	0·45	0·29	0·19

TABLE XVI.

The following table shows the number of cases of infectious disease notified in the City of Cardiff in each year since the adoption of the Infectious Disease (Notification) Act, 1889 :—

Year	Small-Pox.	Diphtheria (including Membranous Group).	Scarlet Fever.	Enteric Fever.	Typhus Fever.	Erysipelas.	Paraperal Fever.	Continued Fever.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Menses.	Totals.
1890	—	72	335	150	—	45	4	2	—	—	—	608
1891	9	70	658	130	—	52	10	—	—	—	—	956
1892	5	164	1,851	118	—	95	12	3	—	—	—	2,248
1893	4	479	816	103	41	152	24	2	—	—	—	1,621
1894	10	343	577	62	1	135	19	3	—	—	—	1,150
1895	1	248	484	79	—	132	17	5	—	—	—	966
1896	45	306	874	74	1	134	21	7	—	—	—	1,462
1897	7	516	758	117	—	163	12	7	—	—	—	1,580
1898	—	960	332	80	—	133	18	6	—	—	—	1,529
1899	—	640	184	94	—	176	13	8	—	—	—	1,115
1900	4	714	383	95	4	106	15	5	—	—	—	1,326
1901	8	734	1,362	73	—	152	16	3	—	—	—	2,348
1902	2	701	1,433	69	—	169	13	7	—	—	—	2,394
1903	65	438	963	100	6	145	20	5	—	—	—	1,742
1904	11	406	658	40	—	112	12	2	—	—	—	1,241
1905	24	327	362	39	—	133	14	3	—	—	—	902
1906	2	333	776	77	—	117	17	1	—	—	—	1,323
1907	16	304	950	62	—	147	16	—	—	—	—	1,495
1908	—	291	475	55	—	167	15	1	—	—	—	1,004
1909	2	283	616	46	—	132	6	2	—	—	—	1,087
1910	1	363	887	36	—	137	8	—	346	—	—	1,778
1911	—	491	753	44	—	127	8	—	366	—	—	1,789
1912	—	536	472	56	—	170	11	—	499	—	—	1,744
1913	3	558	902	27	—	145	8	—	520	166	—	2,329
1914	3	620	1,086	29	—	125	11	—	353	81	—	2,308
1915	—	469	751	20	—	100	12	1	368	102	—	1,823
1916	51	384	478	26	—	90	9	1	372	141	1,799	3,350
1917	—	266	248	13	—	48	8	—	349	110	1,738	2,780
1918	—	252	407	18	—	71	2	—	458	103	2,371	3,682
1919	19	257	2,166	10	—	78	16	—	322	74	447	3,389
1920	—	366	1,351	5	—	68	7	—	275	79	—	2,151

Other cases notified under the Public Health (Notification of Infectious Disease) Regulations,

1918 :—

Encephalitis Lethargica	...	...	...	...	...	7
Malaria	...	...	...	...	...	11
Acute Primary and Acute Influenzal Pneumonia	...	...	...	...	...	139
Cerebro Spinal Meningitis...	...	...	...	...	...	4

SCARLET FEVER.—Eighteen deaths were registered from scarlet fever during the year 1920, being equal to an annual death-rate of 0·08 per 1,000 persons living, as compared with 0·20 the rate in 1919, and with 0·07, the average rate in the ten years 1910–1919.

The mortality from scarlet fever throughout the country was as follows during the year 1920 :—

England and Wales	...	...	...	...	0·04
96 Great Towns	...	...	...	...	0·04
148 Smaller Towns...	...	...	...	...	0·03
Cardiff	...	...	...	...	0·08

The number of cases of scarlet fever notified during the year amounted to 1,351, as compared with 2,166, the number notified in the previous year. The sickness-rate, or rate of notified cases per 1,000 of the population, amounted to 6.35.

The number of cases of scarlet fever notified during each quarter of the year in the three registration sub-districts were as follows :—

Registration Sub-Districts.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Totals.
East Cardiff ...	221	102	93	144	560
Central „ ...	74	53	73	120	320
West „ ...	149	109	92	121	471

TABLE XVII.

The age periods of persons notified to be suffering from scarlet fever and the percentage proportion of deaths to cases notified in each age period were as follows :—

Ages.	No. of cases notified.		Total	No. of Deaths.		Total	Mortality per cent.	
	M.	F.		M.	F.		M.	F.
0— 1 year ...	4	7	11	...	...	...	...	...
1— 5 years ...	132	146	278	2	4	6	0.7	1.4
5—15 „ ...	424	469	893	4	4	8	0.4	0.4
15—25 „ ...	42	69	111	...	1	1	...	0.9
25—65 „ ...	17	41	58	1	2	3	1.7	3.4

TABLE XVIII.

Number of cases removed to the Cardiff Isolation Hospital :—

Ages.	M.	F.	Total	Died.		Total	Mortality per cent	
				M.	F.		M.	F.
0— 1 year ...	1	4	5	...	...	...	...	...
1— 5 years ...	86	98	184	...	3	3	...	3.0
5—15 „ ...	307	342	649	2	3	5	0.6	0.8
15—25 „ ...	35	45	80	...	...	...	...	...
25—65 „ ...	12	28	40	1	2	3	8.3	7.1

DIPHTHERIA AND MEMBRANOUS CROUP.—Twenty-three deaths were registered from these diseases during the year, corresponding to an annual death-rate of 0.10 per 1,000 persons living, as compared with 0.07, the rate in 1919, and with 0.16, the rate in the ten years 1910–1919.

The mortality from diphtheria throughout the country was as follows during the year 1920 :

	Death-rate per 1,000.					
England and Wales	0.15
96 Great Towns	0.16
148 Smaller Towns	0.14
CARDIFF	0.10

The number of cases of diphtheria and membranous croup notified during the year amounted to 366, as compared with 257 in 1919. The fatality, or proportion of deaths to cases notified, was 6·2 per cent. Of the cases notified, 272, or 74·3 per cent., were removed to the Cardiff Isolation Hospital.

Number and distribution of cases of diphtheria notified during each quarter of the year 1920 :—

Registration Sub-Districts.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Totals.
East Cardiff ...	27	33	23	42	125
Central „ ...	37	20	18	41	116
West „ ...	39	34	22	30	125

TABLE XIX.

The number of notifications and the rate of fatality at various age periods during 1920, are shewn below :—

Ages.	No. of Cases Notified.		Total	No. of Deaths.		Total	Mortality per cent.	
	M.	F.		M.	F.		M.	F.
0—1 year ...	3	1	4	2	1	3	66·6	100·0
1—5 years ...	30	43	73	6	6	12	20·9	13·9
5—15 „ ...	110	107	217	4	4	8	3·6	3·7
15—25 „ ...	9	35	44	...	...	...	...	...
25—65 „ ...	3	25	28	...	...	...	...	...

TABLE XX.

Number of cases removed to the Cardiff Isolation Hospital :—

Ages	M.	F.	Total	Died		Total	Mortality per cent	
				M.	F.		M.	F.
0—1 year ...	1	1	2	1	1	2	100·0	100·0
1—5 years ...	29	28	57	5	2	7	17·2	7·1
5—15 „ ...	84	82	166	1	4	5	1·1	4·8
15—25 „ ...	3	27	30	...	...	...	...	...
25—65 „ ...	2	15	17	...	...	...	...	...

During the year swabs were sent to the Cardiff and County Public Health Laboratory from the throats of 411 cases suspected to be diphtheria, the bacteriological examination giving positive results in 128 cases, and negative results in 283.

ENTERIC FEVER.—The number of deaths registered from enteric fever during the year amounted to 5, being equivalent to an annual death rate of 0·02 per 1,000 persons living, as compared with 0·01 in the year 1919, and with 0·03 the average death-rate in the ten years 1910–1919.

The mortality from this disease in the year 1920 throughout the country was as follows :—

	Death-rate per 1,000.
England and Wales ...	0·01
96 Great Towns ...	0·01
148 Smaller Towns ...	0·02
CARDIFF ...	0·02

The number of cases of enteric fever notified during 1920 was 5 ; of these 4 or 80·0 per cent., were removed to the Cardiff Isolation Hospital.

The following table shows the death-rates per 1,000 from enteric fever in periods since the year 1901 in Cardiff :—

1901-1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
0·05	0·03	0·08	0·03	0·06	0·01	0·02	0·02	0·04	0·01	0·02

SMALL-POX.—No deaths have occurred from this disease during the year, and no cases notified.

I am indebted to the Vaccination Officer for the following return of vaccinations within the City during the year 1920 :—

TABLE XXI

Successfully Vaccinated	Insusceptible	Postponed	Certificates of exemption and Statutory Declarations	Died Unvaccinated	Unaccounted for and left the town
3,055	5	83	1,550	256	138

TUBERCULOSIS.—The following report upon certain administrative questions relating to the prevention and treatment of Tuberculosis was submitted to the Health Committee in January, 1920 :—

REPORT OF THE MEDICAL OFFICER OF HEALTH UPON A CIRCULAR OF THE MINISTRY OF HEALTH
re TREATMENT OF TUBERCULOSIS.

"In accordance with a resolution of your Committee of the 14th January, 1920, I beg to submit the following observations upon the circular letter of the Ministry of Health (Welsh Board of Health) of the 9th January, 1920, relating to the Treatment of Tuberculosis.

The greater part of the letter is in relation to the financial adjustments between Local Authorities and the Welsh National Memorial Association, and reference is made to the possibility of the Local Authority taking over and administering any institution now belonging to the Association. It is upon this point that your Town Clerk and Medical Officer of Health have been asked to report, in so far as any such change might affect the relations between the Association and the Cardiff Corporation.

It will be already known to your Committee that the Welsh National Memorial Association obtained a Charter in 1912, with the object of dealing with the prevention and treatment of Tuberculosis in Wales, either in sanatoria or otherwise. For the carrying out of these objects, the Association has entered into arrangements with most of the County Councils, County Borough Councils and Insurance Committees in Wales and Monmouthshire. In this respect Wales is treated as a whole, and contributions to the Association are derived from the rates and the Insurance Committees to which is added a Treasury grant. All the funds are administered by the Association, but the several Councils and Insurance Committees are represented on the Governing Body of the Association. The Councils, as such, have no administrative powers with respect to the treatment of Tuberculosis in their respective areas.

It should be mentioned that the Association itself has provided funds derived from private benefactors, which have enabled it to make very complete arrangements for dealing with Tuberculosis in sanatoria and hospitals throughout the principality. It has, moreover, obtained the services of a very efficient medical staff, who have specialised in the treatment of Tuberculosis, and who act as Superintendents of the sanatoria and hospitals, and as Tuberculosis Officers or Physicians, in the several areas administered by the Association.

The only institution belonging to the Association actually within the City of Cardiff, and with which the Cardiff Sanitary Authority are most directly concerned, is the Tuberculosis Institute or Dispensary, situate at No. 10, The Parade, in premises which are unsuitable for the purpose, but the best obtainable at the present time. The Dispensary is in medical charge of Dr. J. C. Gilechrist, an officer of the Association. The Medical Officer of Health co-operates with Dr. Gilechrist, particularly in the provision of some of the Health Visitors on his staff for the purpose of domiciliary visitation, etc. In these circumstances, it is most desirable that more suitable premises should be found for this clinic or dispensary.

This, however, is not the only clinic with which the Sanitary Authority are concerned which is badly housed. Some more suitable accommodation will have to be found for the several clinics now in operation which are either directly or indirectly under the control of the Sanitary Authority. Rooms in the City Hall are now used for some of these clinics, but the ever increasing numbers which attend are a source of difficulty in the proper working of them. For these and other reasons, I have on more than one occasion, advocated the unification, so far as location is concerned, of all the clinics supported or subsidised by the Sanitary Authority, established with the consent of the Ministry of Health, and assisted by Treasury Grants, i.e. Venereal Disease Clinic, School Clinic (Eye, Nose and Throat, and Dental), Maternity and Child Welfare Centre, Clinic of Neurology and Psychiatry, etc.

Already some of these clinics have been established, or are about to be established, in connection with the Out-patient Department of King Edward VII Hospital, and I would suggest that application be made to the authorities of the Hospital to include the Tuberculosis Clinic or Institute in the number of clinics to be attached to their Out-patient Department.

All the clinics with which the Sanitary Authority are concerned would then be under the same roof. They would all be subsidised, and to some extent controlled by that Authority, an arrangement which would be an advantage from the point of view of efficiency and economy.

It is obvious that at the present time the hospital authorities are not in a position to offer the facilities for carrying out a complete scheme, such as that suggested, they have, indeed, quite insufficient accommodation for their immediate needs, and it is certain that they will soon have to take into consideration the further extension of their ward accommodation. This could not be effected on the present site, as this is already overcrowded with buildings. The alternative would be the removal of the greater part of their wards for in-patients to a more suitable position, where ample hospital provision could be made to meet the requirements of the populous district to be served. If this could be effected, the present buildings in the Newport Road could be adapted and utilised for the several clinics, and a certain number of beds would be set apart for each clinic.

With respect to the Tuberculosis Clinic, there would be a distinct advantage in locating it in the hospital building, and in securing a certain number of beds in connection with it. There is not, in my opinion, any advantage in maintaining the existing conditions under which this Clinic is being carried on. It should form an integral part of the public health administration of the city, and be entirely under the control of the Sanitary Authority. If your Committee are of the same opinion, I would suggest that a representation be made to this effect to the Ministry of Health (Welsh Board of Health), when this and the other matters referred to in their circular letter could be discussed."

The arrangements for dealing with the problem of Tuberculosis in Wales are already well known to your Authority. With this object in view, the Welsh National Memorial Association obtained a Charter in 1912, and entered into arrangements with the County Councils, County Borough Councils, and Insurance Committees in Wales and Monmouthshire. In this respect, therefore, Wales is treated as a whole, and contributions to the Association are derived from the rates, and the Insurance Committees, to which is added a Treasury Grant.

It should be mentioned that in the first instance the Memorial Association was entirely a voluntary association, liberally endowed by the generosity of private donors, but at the present time it is subsidised by grants from the Treasury, from the local rates, and from Insurance Committees, who have administered "Sanatorium Benefit" under the Insurance Act, but whose functions in this respect will come to an end in a very short time. There is much to be said in favour of this arrangement so far as the treatment in sanatoria and similar institutions is concerned, but in County Boroughs and large Urban Districts, the prevention of the spread of infection and the removal of conditions unfavourable to health are essentially matters of local concern. No voluntary association can relieve these authorities of their statutory duties and powers so clearly set forth in the "Tuberculosis Regulations of 1912."

In such Districts the first unit of the scheme, viz.: The Tuberculosis Dispensary, should obviously form part of the Public Health Department, to which should be attached a hospital for the isolation and treatment of advanced cases of Pulmonary Tuberculosis. Under the present arrangements, these cases are not dealt with in a satisfactory manner, too many of them find a temporary habitation in the Union Infirmary, ultimately ending their days in the unfavourable surroundings of their home. Others, of course, terminate their career in the Union Infirmary. These advanced cases are those to which the greatest danger from infection arises, and are therefore those which should receive the special attention of the Sanitary Authority.

The deaths from all forms of Tuberculosis during the year 1920 amounted to 312, including 262 from Pulmonary Tuberculosis or Phthisis. The mortality from Phthisis was equal to an annual death-rate of 1.23 per 1,000, as compared with 1.34 the average rate in the ten years 1910-1919. The 312 deaths from Tuberculosis during the year 1920 include 27 in Glan Ely Hospital, 4 in Sanatoria, 31 in the Cardiff Union Infirmary (including Ely Lodge), 6 in King Edward VII's Hospital, 3 in the Royal Hamadryad Seamen's Hospital, and 14 in other institutions; the remaining 227 dying in their own homes.

The mortality from phthisis and other forms of tuberculosis in Cardiff since the year 1880 is shown in the following table:—

TABLE XXII.

Year.	Deaths from Phthisis.	Deaths from Other Forms of Tuberculosis.	Death-rate per 1,000 (Phthisis).	Year.	Deaths from Phthisis	Deaths from Other Forms of Tuberculosis.	Death-rate per 1,000 (Phthisis).
1880	177	89	3.21	1901	179	122	1.05
1881	176	77	2.96	1902	224	98	1.34
1882	187	68	2.86	1903	217	93	1.28
1883	186	58	2.67	1904	246	98	1.44
1884	223	55	2.97	1905	235	103	1.36
1885	241	107	3.58	1906	229	95	1.31
1886	214	67	2.78	1907	220	91	1.25
1887	210	75	2.72	1908	218	94	1.09
1888	211	93	2.80	1909	234	74	1.19
1889	224	108	2.79	1910	216	88	1.08
1890	231	142	3.18	1911	235	81	1.28
1891	239	124	2.78	1912	244	64	1.32
1892	242	127	1.82	1913	233	69	1.24
1893	230	151	1.68	1914	230	63	1.22
1894	227	134	1.62	1915	252	96	1.33
1895	242	127	1.67	1916	255	91	1.37
1896	203	114	1.38	1917	281	58	1.55
1897	206	131	1.99	1918	312	66	1.77
1898	203	117	1.32	1919	258	66	1.26
1899	208	119	1.32	1920	262	50	1.23
1900	212	110	1.25				

TABLE XXIII.

Death-rates from Phthisis per 1,000 persons living in the several Municipal Wards:—

	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
CARDIFF ...	1.30	1.19	1.28	1.32	1.24	1.22	1.33	1.37	1.55	1.77	1.26	1.23
Roath Ward	0.96	1.18	1.11	0.83	0.80	0.49	0.90	0.72	0.67	0.64	1.05	0.91
Park "	0.95	0.92	1.24	0.99	0.57	1.03	1.15	1.36	1.85	1.39	1.18	1.00
Splott "	0.69	0.76	1.19	1.09	0.86	1.11	1.07	1.10	1.41	1.26	0.77	1.24
Central "	0.81	1.77	3.44	2.64	3.04	2.35	2.89	3.75	2.26	2.26	2.93	2.65
South "	1.40	2.50	2.86	2.57	2.93	3.44	1.47	2.85	5.50	5.11	5.08	4.87
Cathays "	0.72	1.02	0.86	1.22	1.28	0.87	0.96	1.24	1.20	1.45	0.70	0.85
Adamsdown "	1.42	1.24	1.21	1.50	1.10	1.04	1.56	1.40	1.56	2.38	1.45	1.62
Riverside "	0.60	1.27	0.80	1.35	1.26	1.03	1.03	0.81	0.81	1.30	1.11	0.84
Canton "	0.98	1.05	1.04	1.17	1.29	1.35	1.14	0.69	0.95	1.37	0.85	0.95
Grange town "	1.09	1.08	0.90	1.25	1.01	1.07	1.77	1.36	0.90	1.15	1.05	1.22

TABLE XXIV.

Deaths from Pulmonary Tuberculosis and Other Forms of Tuberculosis—age periods and sex:—

Age Periods.	Deaths from Tuberculosis.					
	Pulmonary.			Non-Pulmonary.		
	Males	Females	Totals	Males	Females	Totals
Under 1 year	1	—	1	4	5
1 and under 5	1	1	2	8	10
5 " " 10	1	3	4	2	3
10 " " 15	2	5	7	2	3
15 " " 20	12	19	31	1	6
20 " " 25	19	18	37	4	4
25 " " 35	47	36	83	5	7
35 " " 45	23	14	37	5	7
45 " " 55	24	13	37	2	2
55 " " 65	17	1	18	2	2
65 and upwards	4	1	5	1	1
Totals ...	151	111	262	33	17	50

TABLE XXV.

Deaths from Pulmonary Tuberculosis and Other Forms of Tuberculosis in Municipal Wards :—

	Deaths from Tuberculosis.					
	Pulmonary			Non-Pulmonary		
	Males	Females	Totals	Males	Females	Totals
Central	15	14	29	3	4	7
South	36	11	47	7	2	9
Cathays	11	11	22	4	3	7
Adamsdown	9	10	19	3	2	5
Riverside	11	5	16	1	2	3
Canton	14	14	28	8	1	9
Grangetown	16	12	28	3	1	4
Roath	12	9	21	2	—	2
Park	15	13	28	—	1	1
Splott	12	12	24	2	1	3
Totals ...	151	111	262	33	17	50

TABLE XXVI.

Notification of cases of Pulmonary Tuberculosis and Other Forms of Tuberculosis—age periods and sex :—

Age Periods.	Notification of Tuberculosis					
	Pulmonary			Non-Pulmonary		
	Males	Females	Totals	Males	Females	Totals
Under 1 year	—	—	—	1	—	1
1 and under 5	—	—	—	5	10	15
5 " " 10	2	2	4	3	4	7
10 " " 15	2	3	5	7	9	16
15 " " 20	18	24	42	3	7	10
20 " " 25	25	18	43	9	3	12
25 " " 35	51	32	83	5	5	10
35 " " 45	34	20	54	4	2	6
45 " " 55	14	8	22	—	—	—
55 " " 65	14	2	16	1	1	2
65 and upwards	6	—	6	—	—	—
Totals ...	166	109	275	38	41	79

TABLE XXVII

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the year 1920.

		NOTIFICATIONS ON FORM A.												NOTIFICATIONS ON FORM B.					NOTIFICATIONS ON FORM C.		
		Primary Notifications.												Total Notifications (i.e. including cases previously notified by other doctors)	Primary Notifications.			Total Notifications (i.e. including cases previously notified by other doctors).	Poor Law Sanato- ria.		
		0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 & up- wards.	Total		Under 5	5 to 10	10 to 15			Total.	
Pulmonary :—																					
Males ...	...	...	...	2	2	18	25	51	34	14	14	6	166	179	...	...	...	...	2	93
Females ...	...	...	...	2	1	24	18	32	20	8	2	...	107	123	...	...	2	2	2	52
Non-Pulmonary :—																					
Males ...	...	1	5	2	6	3	9	5	4	...	1	...	36	38	...	1	1	2	2	19
Females ...	...	...	10	2	8	7	3	5	2	...	1	...	38	40	...	2	1	3	3	10
Totals	1	15	8	17	52	55	93	60	22	18	6	347	380	...	3	4	7	7	4	174

TABLE XXVIII.

Notifications of cases of Pulmonary Tuberculosis and Other Forms of Tuberculosis in Municipal Wards:—

Municipal Wards	Notifications of Tuberculosis					
	Pulmonary			Non-Pulmonary		
	Males	Females	Totals	Males	Females	Totals
Central	27	6	33	3	2	5
South	17	4	21	6	4	10
Cathays	15	7	22	7	8	15
Adamsdown	9	5	14	5	2	7
Riverside	26	17	43	5	3	8
Canton	9	18	27	2	6	8
Grangetown	22	14	36	3	4	7
Roath	12	4	16	2	1	3
Park	11	20	31	2	5	7
Sploott	20	12	32	3	6	9
Totals	168	107	275	38	41	79

TABLE XXIX.

Cases of Tuberculosis visited by the Health Visitors—in Municipal Wards, and whether “insured” or “uninsured” persons, or “dependants.”

Municipal Wards	Insured.		Dependants.		Uninsured.		Totals
	Males	Females	Males	Females	Males	Females	
Central	19	9	13	25	2	3	71
South	19	3	9	10	1	—	42
Cathays	45	8	11	28	3	8	103
Adamsdown	8	1	—	7	—	—	16
Riverside	10	1	1	8	1	—	21
Canton	33	16	9	26	3	9	96
Grangetown	35	11	10	28	2	2	88
Roath	13	9	5	14	2	2	45
Park	21	8	4	18	1	9	61
Sploott	30	15	12	27	—	7	91
Totals	233	81	74	191	15	40	634

TABLE XXX.

Cases admitted to and discharged from Sanatoria and Hospitals according to notifications (Forms C. and D.) received under the Tuberculosis Regulations, 1912 :—

Age Periods.	Admitted.			Discharged.		
	Males	Females	Totals	Males	Females	Totals
Under 1 year	—	—	—	—	—	—
1 and under 5	—	2	2	2	2	4
5 " " 10	1	3	4	2	3	5
10 " " 15	11	3	14	10	3	13
15 " " 20	13	13	26	13	14	27
20 " " 25	16	15	31	7	12	19
25 " " 35	30	14	44	30	12	42
35 " " 45	27	12	39	31	9	40
45 " " 55	10	—	10	11	—	11
55 " " 65	4	—	4	3	—	3
65 and upwards	—	—	—	1	—	1
Totals	112	62	174	110	55	165

Applications to the Cardiff Insurance Committee to Sanatorium Benefit and form of treatment recommended by the Committee :—

Applications ... ..	...	...	...	...	...	353
Form of Treatment :—						
Residential ... ..	...	...	...	...	...	127
Domiciliary ... ..	...	...	...	...	...	144
Institute (Dispensary) ... ..	...	...	...	...	...	95
No treatment ... ..	...	...	...	...	...	203

Many of the cases received more than one form of treatment ; the figures given above relate to the treatment recommended in all instances.

TABLE XXXI.

New cases of Tuberculosis (residents of Cardiff) examined at the Tuberculosis Institute (Welsh National Memorial Association) :—

Age Periods	Males	Females	Totals
Under 1 year	—	—	—
1 and under 5	1	9	10
5 " " 10	1	5	6
10 " " 15	8	9	17
15 " " 20	16	17	33
20 " " 25	23	19	42
25 " " 35	30	25	55
35 " " 45	26	17	43
45 " " 55	6	1	7
55 " " 65	3	1	4
65 and upwards	—	—	—
Totals	114	103	217

TABLE XXXII.

Distribution of Tuberculosis Institute cases in Municipal Wards and whether insured or uninsured persons :—

Municipal Wards.				Insured	Uninsured	Totals
Central	...	...	...	13	4	17
South	...	...	...	7	9	16
Cathays	...	...	...	17	7	24
Adamsdown	...	...	...	9	5	14
Riverside	...	...	...	8	13	21
Canton	...	...	...	17	14	31
Grangetown	...	...	...	18	12	30
Roath	...	...	...	10	5	15
Park	...	...	...	9	13	22
Splott	...	...	...	17	10	27
Totals				125	92	217

CARDIFF ISOLATION HOSPITAL.

Report of the Medical Superintendent for the year 1920.

	0 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	Totals.
Remaining in Hospital 27th Dec., 1919 :—							
Scarlet Fever	44	100	18	6	2	...	170
Diphtheria	3	15	2	...	...	...	20
Other Diseases ... ..	...	...	...	...	...	1	1
Totals	47	115	20	6	2	1	191
Admitted during the year 1920 :—							
Scarlet Fever	201	665	94	33	8	4	1,005
Diphtheria	59	174	35	11	4	5	288
Enteric Fever ... ..	...	...	2	2	2	...	6
Small Pox ... ..	...	...	1	...	...	...	1
Other Diseases ... ..	...	2	8	4	2	1	17
Totals	260	841	140	50	16	10	1,317
Totals under Treatment in 1920	307	956	160	56	18	11	1,508
Of the above there were discharged :—							
(a) Recovered :—							
Scarlet Fever	204	669	90	32	9	3	1,007
Diphtheria	51	167	36	11	4	4	273
Enteric Fever ... ..	...	...	1	2	2	...	5
Small Pox ... ..	...	...	1	...	...	...	1
Other Diseases ... ..	...	...	8	3	2	2	15
Totals	255	836	136	48	17	9	1,301
(b) Died :—							
Scarlet Fever	3	5	...	3	...	...	11
Diphtheria	9	5	...	...	...	...	14
Enteric Fever ... ..	...	...	1	...	...	...	1
Other Diseases ... ..	...	2	...	...	...	...	2
Totals	12	12	1	3	...	...	28
Remaining in Hospital 1st January, 1921 :—							
Scarlet Fever	38	91	22	4	1	1	157
Diphtheria	2	17	1	...	...	1	21
Other Diseases ... ..	...	...	...	1	...	...	1
Totals	40	108	23	5	1	2	179
Totals under treatment in 1920	307	956	160	56	18	11	1,508

Mortality per cent. under treatment :—

Scarlet Fever	1 per cent.	Enteric Fever	16.6
Diphtheria	4.54	Other Diseases	11.1

B. W. BROAD, M.B., *Medical Superintendent.*

MILK SUPPLY.—The quality of the milk supplied to Cardiff, regarded from a chemical standard, is shown in the Annual Report of the Public Analyst, in which it is found that out of 511 samples of milk submitted for analysis, 15 were adulterated, either by the addition of water or abstraction of fat. With respect to the cleanliness, there is still much room for improvement. This aspect of the milk question is of more importance from a public health point of view than adulteration. Dirty milk may be the means of conveying specific disease germs to the consumer, together with bacteria of a less harmful character. It is generally assumed that with care fresh milk from the farm can be produced containing not more than 10,000 bacteria per cubic centimetre. By the time the milk has arrived at the milk shops in the town, the number of bacteria has greatly increased. Hence the importance of a systematic bacteriological examination. This has been carried out during the year with the following results. In each case in which the number of bacteria was found to be excessive, the milk dealer was cautioned, and instructions were given with a view of improving the conditions of storage and distribution.

CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF MILK, 1920.

Number	Date taken	Description of Business	No. of Bacteria per c. c.	Bacilli coli content per c. c.	Source of Supply
	1920.				
1	Jan. 6	Dairy, Cardiff ...	12,000	More than 10	Rumney.
2	" 6	Milk Cart in Street ...	64,000	" 10	Axbridge, Somerset
3	" 20	Union Workhouse ...	62,000	" 10	Brent Knoll, Somerset
4	" 20	Sanatorium ...	440,000	" 1,000	Local Cowshed
5	" 27	Cardiff Milk Shop ...	320,000	" 1,000	Axbridge, Somerset
6	" 27	" " ...	142,000	" 1,000	" "
7	Feb. 10	Cardiff Cowkeeper ...	190,000	" 100	Ely Moors, Cardiff
8	" 10	Sanatorium ...	970,000	" 1,000	Local Cowshed
9	" 18	King Edward VII Hospital	35,000	" 10	" "
10	" 18	Cardiff Milk Shop ...	104,000	" 10	Somerset
11	Mar. 5	Milk Cart in Street ...	23,000	" 1	Rumney
12	" 5	Cardiff Dairy ...	45,000	" 100	Somerset
13	" 10	" " ...	56,000	" 1,000	Axbridge, Somerset
14	" 10	Milk Cart in Street ...	150,000	" 10,000	Rumney
15	" 16	" " ...	62,000	" 10	Somerset
16	" 16	Cardiff Dairy ...	112,000	" 10	"
17	" 23	Milk Cart in Street ...	640,000	" 10	"
18	" 23	" " ...	75,000	" 10	"
19	" 30	Cardiff Dairy ...	38,000	" 10	Local Cowshed
20	" 30	Milk Cart in Street ...	102,000	" 10	Rumney
21	Ap. 14	" " ...	122,000	" 1	Local Farm
22	" 14	" " ...	25,000	" 10	Rumney

CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF MILK, 1920—con.

Number	Date taken	Description of Business	No. of Bacteria per c.c.	Bacilli coli content per c.c.	Source of Supply
23	1920 May 3	King Edward VII Hospital	<i>Microscopical examination of sediment:</i> Numerous bacilli and diplococci. Vascular tissue, pitted vessels, vegetable parenchyma, starch granules. Cellular elements and streptococci fairly numerous.		Local Farm
24	" 3	" " " " ...			
25	" 6	Union Workhouse ...		More than 10	Somerset
26	" 6	Cardiff Dairy ...	250,000	" 10	"
27	" 13	Station Milk ...	80,000	" 1,000	"
28	" 13	Cardiff Dairy ...	32,000	" 10	"
29	" 18	Milk Cart in Street ...	81,000	" 10	Axbridge
30	" 18	Cardiff Dairy ...	68,000	" 1,000	Somerset
31	June 3	Cardiff Cowshed ...	114,000	" 10	Local Cowshed
32	" 3	Cardiff Dairy ...	320,000	" 1,000	Somerset
33	" 8	" " " " ...	160,000	" 10	"
34	" 8	" " " " ...	260,000	" 10,000	"
35	" 17	Cardiff Milkseller (G.W.R. Station)	135,000	" 100	"
36	" 17	Cardiff Dairy ...	71,000	" 10	"
37	" 29	Milk Cart in Street ...	110,000	" 100	Llanedarne
38	" 29	" " " " ...	5,000	" 1	Lisvane
39	July 14	Milk Cart, G.W.R. Station	19,000	" 10	St. Clears
40	" 14	Cardiff Milkshop ...	62,000	" 10,000	Somerset
41	Aug. 10	Union Workhouse ...	460,000	" 10,000	Whitland
42	" 10	" " " " ...	700,000	" 10,000	"
43	Sept. 6	Milk Cart in Street ...	160,000	" 100	Lisvane
44	" 6	King Edward VII Hospital	5,000,000	" 100,000	Whitland
45	" 14	" " " " " " ...	750,000	" 10,000	"
46	" 14	Cardiff Dairy ...	30,000	" 10	Chepstow
47	" 23	Milk Cart in Street ...	60,000	" 1	Rumney
48	" 23	" " " " " " ...	80,000	" 100	"
49	" 29	" " " " " " ...	20,000	" 10	"
50	" 29	Cardiff Dairy ...	30,000	" 10	Cheddar Valley
51	Oct. 7	" " " " " " ...	160,000	" 100	Somerset
52	" 7	Milk Cart in Street ...	40,000	" 10	Rumney
53	" 13	Cardiff Dairy ...	50,000	" 100	Somerset
54	" 13	Milk Cart in Street ...	40,000	" 1,000	"

CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF MILK, 1920—con.

Number	Date taken	Description of Business	No. of Bacteria per c.c.	Bacilli coli content per c.c.	Source of Supply
55	1920 Oct. 21	Cardiff Dairy ...	10,000	More than 100	Cheddar Valley
56	" 21	Milk Cart in Street ...	20,000	" 10	Llanedarne
57	" 28	Cardiff Dairy ...	20,000	" 1	Llanishen
58	" 28	Milk Cart in Street ...	600,000	" 10,000	Somerset
59	Nov. 9	" " ...	120,000	" 1,000	"
60	" 9	Cardiff Dairy ...	280,000	" 100	"
61	" 17	" " ...	80,000	" 10	"
62	" 17	" " ...	140,000	" 100	Carmarthen
63	" 25	Milk Truck in Street ...	90,000	" 10	Somerset
64	" 25	King Edward VII Hospital	130,000	" 100	Pengam Farm
65	Dec. 2	Milk Cart in Street ...	20,000	" 1	Lisvane
66	" 2	Cardiff Dairy ...	46,000	" 1,000	Somerset
67	" 9	Cardiff Milkshop ...	490,000	" 100	"
68	" 9	Milk Cart in Street ...	70,000	" 1	Whitland
69	" 22	Cardiff Milk Shop ...	310,000	" 1,000	Somerset
70	" 22	" " ...	160,000	" 10	"

CARDIFF CORPORATION ACT, 1909, PART VII, SECTIONS 42-46.—Fifteen samples of milk were taken from cowsheds, institutions and milk carts within the City of Cardiff under the above "Act" for "Tuberculosis," and the following table shows the results of analysis.

MILK TAKEN FOR TUBERCULOSIS.

Date Sample taken	Description of Business	Positive or Negative	No. of Cows	Source of Supply
1920 Jan. 6	Milk Cart in Street ...	Negative ...	20	Axbridge, Somerset
" 27	Cardiff Dairy ...	" ...	20	" "
Feb. 18	King Edward VII Hospital	" ...	23	Cardiff Cowshed
Mar. 10	Cardiff Dairy ...	" ...	20	Whitland
" 23	" " ...	" ...	25	Axbridge, Somerset
April 14	Milk Cart in Street ...	" ...	35	Llanederne
May 13	G.W.R. Station ...	" ...	14	Somerset
June 3	Cardiff Cowkeeper ...	" ...	34	Pengam Farm
" 17	G.W.R. Station ...	" ...	20	St. Clears, Whitland
Sept. 6	Milk Cart in Street ...	" ...	25	Lisvane

MILK TAKEN FOR TUBERCULOSIS—con.

Date Sample taken	Description of Business.	Positive or Negative	No. of Cows	Source of Supply
Sept. 23	Milk Cart in Street ...	Negative ...	12	Rumney
Oct. 7	" " " ...	Positive ...	25	" "
" 21	" " " ...	Negative ...	30	Llanederne
Nov. 9	Cardiff Dairy ...	" ...	5	Cardmarthen
Dec. 2	Cardiff ...	" ...	16	Lisvane

CARDIFF AND COUNTY PUBLIC HEALTH LABORATORY.—The following statement shows the work carried out for Cardiff during the year 1920.

Mixed Milks from Cardiff examined for Tubercle Bacilli :—

Number examined ...	...	...	...	15
Positive ...	...	...	...	1
Negative ...	...	...	...	14
Percentage of positive results	...	...	...	6.6

Although the samples were all from milk supplies serving the City, the original sources of the milk were, in most cases, outside Cardiff.

Bacteriological Examinations :—

Water Supplies ...	...	...	...	258
Suspected Diphtheria ...	...	...	...	411
Suspected Typhoid Fever ...	...	...	...	31
Paratyphoid, A ...	...	...	...	18
" B. ...	...	...	...	18
Sputa for Tubercle Bacilli ...	...	...	...	478
Urine " " ...	...	...	...	1
Rodents for Plague ...	...	...	...	245
Diseased Meat ...	...	...	...	8
Gonococci ...	...	...	...	116
Cerebro Spinal Fluids ...	...	...	...	12
Meningococci (Swabs) ...	...	...	...	16
Milks for Tubercle Bacilli ...	...	...	...	15
Milks for Other Organisms ...	...	...	...	68
Wasserman Reactions ...	...	...	...	1,023
Other Examinations ...	...	...	...	6
Malaria ...	...	...	...	3
Ringworm ...	...	...	...	2
				2,729

Chemical Examinations :—

Water Supplies ...	...	...	...	89
Milk and Milk Products ...	...	...	...	68
Urine Analyses ...	...	...	...	1
Other Examinations ...	...	...	...	4

Total ... 2,891

The specimens for suspected diphtheria, typhoid fever, and tuberculosis submitted for examination from Cardiff, together with the results of such examinations, are shown below :—

Nature of Examination	Positive results	Negative results	Total	Percentage of Positive results
Suspected Diphtheria ...	128	283	411	31.1
" Typhoid Fever	4	27	31	12.9
" Tuberculosis ...	119	359	478	24.8

VENEREAL DISEASES.

By an "Order" dated the 12th July, 1916, the Local Government Board made The Public Health (Venereal Diseases) Regulations, 1916.

These Regulations are based upon the recommendations of the Royal Commission on Venereal Diseases and require Councils of Counties and County Boroughs to organize and carry into effect schemes for the provision of facilities for the diagnosis and treatment of Venereal diseases. They provide that these Councils (1) shall, subject to the approval of the Board, make arrangements for enabling any medical practitioner practising in the area of the Council to obtain, at the cost of the Council, a scientific report on any material which the practitioner may submit from a patient suspected to be suffering from Venereal Disease, and (2) shall prepare and submit to the Board a scheme (a) for the treatment at and in hospitals or other institutions of persons suffering from venereal disease, and (b) for supplying medical practitioners with salvarsan or its substitutes for the treatment and prevention of venereal disease.

The Regulations came into operation on the date of the Order.

The payments made by the Council for the work carried out under these Regulations are subject to the approval of the Ministry of Health, who repay to the Council 75 per cent. of the cost. As it was necessary to make the arrangements for the free treatment of venereal diseases widely known, notices were affixed to public lavatories and other suitable places, and leaflets were distributed to the owners of lodging houses, to midwives, and other persons likely to require the information contained in them. A special circular letter was sent to all medical practitioners setting forth the details of the arrangements.

The Clinics are available as under :—

- (1) At King Edward VII. Hospital a clinic for men, in charge of a male medical officer, is open on Mondays and Thursdays, from 6 p.m., and on Thursdays from 9 a.m.

A clinic for women, in charge of a female medical officer, is open on Tuesdays from 5 p.m., and on Fridays from 2 p.m.

- (2) At the Royal Hamadryad Seamen's Hospital, a clinic for seamen only is open on Mondays and Fridays from 3.0 p.m. Beds are set apart in both hospitals for in-patients.

The complete scheme came into operation on the 16th April, 1917, and has been working quite satisfactorily since that date. As it is desirable to make this new departure as widely known as possible and to disseminate explanatory information relating to the scheme, an arrangement has been entered into with the local branch of the National Council for combating Venereal Diseases for courses of instructional lectures by qualified and experienced lecturers selected by the National Council. Several such courses have already been held, and have been well attended.

During the year some suggestions were made by Colonel Harrison, Medical Officer of the Ministry of Health, relating to improvements which should be effected in connection with the Clinics at the Hospitals.

It is now proposed to open a New Clinic in an Annexe to King Edward VII's. Hospital in place of the existing one in the Out-patient Department of that Hospital, and to improve the irrigation arrangements by the construction of a new Irrigation Department to be open continuously.

Colonel Harrison also advised that the arrangements at the Clinic at the Seamen's Hospital were inadequate, and that an Army Hut should be obtained and converted into a treatment centre, and that an additional Medical Officer should be appointed.

These suggestions have now been adopted by the Council and Hospital Committees and the necessary alterations are now being made. The Assistant Medical Officer of Health of the Port Sanitary Authority has been appointed to assist in the Clinic at the Seamen's Hospital.

The following are the Annual Returns relating to the year ending 31st December, 1920.

KING EDWARD VII. HOSPITAL.

1. Total number of persons dealt with during the year at or in connection with the out-patient clinic and suffering from :—

(a) Syphilis	...	...	...	619
(b) Soft Chancre	...	...	...	40
(c) Gonorrhœa	...	...	...	630
(d) Syphilis and Soft Chancre	...	...	...	4
(e) Syphilis and Gonorrhœa	...	...	...	88
(f) Gonorrhœa and Soft Chancre	...	...	...	10
(g) Syphilis, Soft Chancre and Gonorrhœa	...	...	...	3
(h) Conditions other than Venereal	...	...	...	189
Total	...	...	...	1,583

2. Total attendances of all patients during the year at the out-patient clinic : 12,493.

3. Aggregate number of "In-patient days" of treatment during the year : 680.

ROYAL HAMADRYAD SEAMEN'S HOSPITAL.

1. Total number of persons dealt with during the year at or in connection with the out-patient clinic and suffering from :—

(a) Syphilis	...	...	...	483
(b) Soft Chancre	...	...	...	110
(c) Gonorrhœa	...	...	...	288
(d) Syphilis and Soft Chancre	...	...	...	54
(e) Syphilis and Gonorrhœa	...	...	...	132
(f) Gonorrhœa and Soft Chancre	...	...	...	70
(g) Syphilis, Soft Chancre and Gonorrhœa	...	...	...	18
(h) Conditions other than Venereal	...	...	...	79
Total	...	...	...	1,234

2. Total attendances of all patients during the year at the out-patient clinic : 12,872.

3. Aggregate number of "In-patient days" of treatment during the year : 4,679.

SANITARY ADMINISTRATION AND INSPECTION.—During the year the Cardiff Corporation Act, 1920, became operative. Part VIII. contains the clauses relating to Sanitary matters. The most important of these are the following :—

SANITARY REGULATIONS AND INFECTIOUS DISEASE.

91.—(1) The Corporation may by notice in writing require the owner or occupier of any dwelling-house, warehouse or shop in the City to provide portable galvanised iron dustbins in lieu of ashpits or ashtuhs or other receptacles for refuse, and such bins shall be of such size and construction as may be approved by the Corporation.

(2) Every owner or occupier having provided any receptacle pursuant to this section shall maintain the same in good order and condition.

(3) Any owner or occupier who fails within fourteen days after notice given to him to comply with the requirements of the Corporation under sub-section (1) of this section, or who fails to comply with his obligations under sub-section (2) of this section, shall be liable to a penalty not exceeding twenty shillings and to a daily penalty not exceeding five shillings.

(4) Provided that this section shall not apply to any ashpits or ashtuhs or other receptacles for refuse in use at the passing of this Act so long as the same are of suitable material, size and construction and in proper order and condition.

92.—Where premises abutting upon any street are so situate that surface water from such premises flows on, to or over the footpath of such street, the owner of such premises shall within fourteen days after

service of a notice by the Corporation for that purpose execute such works as may be reasonably practicable to prevent the water from such premises from flowing over the footpath, and in default of compliance with such notice within the period aforesaid such owner shall be liable to a penalty not exceeding five pounds and to a daily penalty not exceeding forty shillings.

93.—(1) The Contractor or builder engaged in or upon the construction, re-construction or alteration of any building or of any works in the City shall where practicable provide to the reasonable satisfaction of the Corporation and until the completion of any such construction, re-construction or alteration, sanitary conveniences in or in connection with such building or works for the accommodation of the workmen employed.

(2) Any person who shall offend against this section shall be liable to a penalty not exceeding five pounds and to a daily penalty not exceeding forty shillings.

94.—The powers given by section 19 (Extension of 38 and 39 Vict. cap. 55 s. 41) of the Public Health Acts Amendment Act, 1890, in relation to two or more houses belonging to different owners shall extend and apply to two or more houses belonging to the same owner.

95.—If any person causes any drain, water-closet, earth-closet, privy or ashpit to be a nuisance or injurious or dangerous to health by wilfully destroying or damaging the same or any water supply, apparatus, pipe or work connected therewith or by otherwise wilfully stopping up or wilfully interfering with or improperly using the same or any such water supply, apparatus, pipe or work he shall be liable to a penalty not exceeding five pounds. Provided that nothing in this section shall prejudice any right which the owner or occupier of any premises aggrieved by any such act may have to recover compensation in respect of any damage suffered by him by reason of such act.

96.—When any person suffering from infectious disease whereof notice shall have been given to the medical officer shall die in the City of such disease the medical officer may give notice thereof to the person responsible for the conduct of the burial of the body of such person and in such case it shall not be lawful to transport any such body by railway or other public conveyance (not being a conveyance reserved for such purpose) unless and until the medical officer has certified that every precaution necessary for the public safety has been adopted to his satisfaction and any undertaker and any person so responsible who shall after the giving of such notice knowingly remove or assist in removing such body without such certificate and any person who unless unaware of such notice shall procure or endeavour to procure the removal of such body without having obtained such certificate shall be liable to a penalty not exceeding ten pounds.

97.—In addition to the powers conferred by Section 142 of the Public Health Act, 1875, and Section 10 of the Infectious Disease (Prevention) Act, 1890, the direction by a Justice as to burial of a dead body which is authorised by those sections or one of them may be given and if given shall be carried into effect either without any direction as to the removal of the body to a mortuary or notwithstanding that the body is already in a mortuary.

98.—Any person who being in charge of the body of any person who has died from any infectious disease shall permit or allow any other person unnecessarily to come into contact with such body shall be liable to a penalty not exceeding five pounds.

99.—Any river, stream or water-course or any part or parts thereof respectively within the City so choked or silted up as to obstruct or impede the proper flow of water along the same and thereby to cause or render probable an overflow of such river, stream or water-course on, to or into the land and property adjacent thereto shall be deemed to be a nuisance within the meaning of Section 91 of the Public Health Act, 1875, and all the provisions of that Act relating to nuisances shall apply to every such river, stream or water-course notwithstanding that the same may not be injurious to health. Provided that this section shall not apply to any canal belonging to any canal company incorporated by Act of Parliament.

100.—If the occupier of any house or part of a house or premises shall prevent the owner thereof from carrying into effect any requirement of the Corporation under this Part of this Act then after notice of this provision shall have been given by the owner to the occupier any court of summary jurisdiction upon proof thereof may make an order in writing requiring the occupier to permit the owner to execute the works required by the Corporation to be done and if after the expiration of seven days from the service of such order the occupier shall continue to refuse to permit the owner to execute the said works he shall for every day during which he shall so continue to refuse be liable to a penalty not exceeding forty shillings, and during the continuance of his refusal the owner shall be discharged from any penalties to which he might otherwise have become liable by reason of his default in executing such works.

101.—The provisions of Section 102 (Power of entry of local authority) and Section 103 (Penalty for disobedience of order) of the Public Health Act, 1875, shall extend and apply to the purposes of the foregoing provisions of this Part of this Act as if those purposes had been mentioned in the said Section 102.

102.—Nothing in the sections of this Act of which the marginal notes are "For preventing water flowing on footpaths" and "Sanitary conveniences for workmen engaged on buildings" shall apply to any building (not used as a dwelling-house) railway or work constructed by or belonging to or which may hereafter be constructed by or belong to any railway company in the exercise of their statutory powers or to any lands held or acquired or which may hereafter be held or acquired by any such company and used for the purposes (other than for a dwelling-house) of the undertaking of such company with the authority of Parliament.

SANITARY INSPECTION OF DISTRICT.—The general sanitary inspection of the district, inspection of factories, and workshops, inspection of shops and the Shops Acts, inspection of seamen's and common lodging houses, the inspection of meat and other food in shops and stores, and the taking of samples for analysis under the Sale of Food and Drugs Acts, were carried out during the year 1920 by Mr. S. Evans, Chief Inspector of Nuisances, with the assistance of 14 Assistant Inspectors.

For the purposes of inspection, the City is divided into five districts, as follows :—

- District No. 1.—Central and Cathays Wards.
 „ No. 2.—Park and Roath Wards.
 „ No. 3.—Adamsdown and Splott Wards.
 „ No. 4.—South and Grangetown Wards.
 „ No. 5.—Riverside and Canton Wards.

The following statement, in addition to other tables in this report, shows the nature and extent of the work performed by the Chief Inspector and his Assistants.

SUMMARY OF SANITARY INSPECTION OF DWELLING HOUSES, &c., DURING THE YEAR 1920 :—

Complaints of Nuisances received	...	...	...	...	1,403
House Inspections	...	...	...	...	3,354
Re-inspections of houses	...	...	...	...	15,222
Drains tested with smoke	...	...	...	...	157
„ „ chemicals	...	...	...	...	2,661
Notices served :—					
Informal	...	...	...	...	2,346
Statutory	...	...	...	...	229
Notices complied with :—					
Informal	...	...	...	...	2,091
Statutory	...	...	...	...	245
Towns improvement Clauses Act, 1847 :—					
Notices <i>re</i> defective shutes served	...	...	...	...	225
„ „ „ complied with	...	...	...	...	224

In connection with the sanitary inspection of dwelling-houses, 5041 sanitary defects were remedied, details of which are given below :—

Drains unchoked and repaired	...	...	...	...	375
Soil pipes, ventilation shafts and fresh air inlets repaired	...	...	...	...	15
New W.C. pans provided	...	...	...	...	56
New syphon traps provided	...	...	...	...	1
New gully traps provided	...	...	...	...	8
W.Cs. repaired	...	...	...	...	23
W.Cs. cleansed	...	...	...	...	32
Flushing apparatus provided	...	...	...	...	—
„ „ repaired	...	...	...	...	31
Trough outlets repaired	...	...	...	...	79
Roofs repaired	...	...	...	...	1,007
Shutes repaired	...	...	...	...	718
Down-pipes repaired	...	...	...	...	119
Chimneys repaired	...	...	...	...	73
Inside plastering repaired	...	...	...	...	343
Outside „ „	...	...	...	...	154
Areas repaired	...	...	...	...	13
Yard surfaces repaired	...	...	...	...	302
Yards, etc., cleansed	...	...	...	...	8
Outhouses cleansed or repaired	...	...	...	...	1
Accumulations removed	...	...	...	...	41

Manure receptacles provided	...	...	...	...	...	1
" " repaired	...	...	...	...	...	3
Inside Walls repaired	...	...	...	...	...	142
Doors repaired	...	...	...	...	...	138
Floors repaired	...	...	...	...	...	356
Windows repaired	...	...	...	...	...	421
Ceilings repaired	...	...	...	...	...	151
Houses, bedding, etc., cleansed	...	...	...	...	...	39
Ventilation improved	...	...	...	...	...	10
Water supply provided	...	...	...	...	...	63
Overcrowding abated	...	...	...	...	...	5
Other Nuisances abated	...	...	...	...	...	313

Particulars as to the inspection of premises periodically inspected during the year 1920 are herewith given :—

OFFENSIVE TRADES :—

Number on Register	...	...	...	...	...	38
Inspections	...	...	...	...	...	122
Notices served	...	...	...	...	...	2
Notices complied with	...	...	...	...	...	6

DAIRIES, COWSHEDS AND MILKSHOPS —

Milkshops on Register	...	...	...	...	...	381
Cowsheds on Register	...	...	...	...	...	4
Inspection of Milkshops	...	...	...	...	...	785
Notices served	...	...	...	...	...	36
Notices complied with	...	...	...	...	...	31
Inspection of Cowsheds	...	...	...	...	...	101
Notices served &c.	...	...	...	...	...	4
Notices complied with	...	...	...	...	...	1

SHOPS, STORES, &C. :—

Inspections of butchers' shops	...	...	...	...	...	1,161
" provision shops	...	...	...	...	...	469
" markets	...	...	...	...	...	829
" wholesale stores	...	...	...	...	...	276
" fish and fruit shops	...	...	...	...	...	362
" storage premises	...	...	...	...	...	83
Other Inspections	...	...	...	...	...	267
Butter and Margarine Factories	...	...	...	...	...	89

MISCELLANEOUS INSPECTIONS :—

Public Houses	...	...	...	...	...	477
Notices served	...	...	...	...	...	72
Notices complied with	...	...	...	...	...	95
Theatres, etc.	...	...	...	...	...	79
Notices served	...	...	...	...	...	10
Notices complied with	...	...	...	...	...	5
Fried-fish Shops	...	...	...	...	...	157
Notices served	...	...	...	...	...	23
Notices complied with	...	...	...	...	...	21
Ice-cream Shops	...	...	...	...	...	226
Notices served	...	...	...	...	...	15
Notices complied with	...	...	...	...	...	11
Piggeries	...	...	...	...	...	192
Notices served	...	...	...	...	...	3
Notices complied with	...	...	...	...	...	3
Houses Let in Lodgings	...	...	...	...	...	144
Notices served	...	...	...	...	...	41
Notices complied with	...	...	...	...	...	31

Smoke Observations	...	...	...	...	...	26
Inspections of Urinals	...	...	...	...	...	238
Visits to Owners <i>re</i> Notices	...	...	...	...	...	668
Other visits	...	...	...	...	...	1,604

COMMON LODGING HOUSES :—

Common Lodging Houses on Register	...	...	...	15
Day Inspections	...	...	...	1,321
Night Inspections	...	...	...	82
Notices served	...	...	...	71
Notices complied with	...	...	...	65

SEAMEN'S LODGING HOUSES :—

Seamen's Lodging Houses on Register	...	...	...	144
Licences granted	...	...	...	199
Licences relinquished	...	...	...	55
Day Inspections	...	...	...	4,262
Night Inspections	...	...	...	247
Notices served under Byelaws	...	...	...	241
Notices under Byelaws complied with	...	...	...	214
Notices served under Public Health Acts	...	...	...	100
Notices under Public Health Acts complied with	...	...	...	93
Persons cautioned for lodging seamen without being licensed	...	...	...	53

FOOD INSPECTION.—The inspection of meat at the Public Abattoirs has been carried out satisfactorily during the year, under the arrangements set forth in the Annual Report for 1909. Mr. J. P. Mullane, M.R.C.V.S., is the Chief Meat Inspector, with two Inspectors under his direction, viz. : Inspectors T. R. Evans and H. Tattersall, each holding the Certificate for Inspectors of Meat and other Foods of the Royal Sanitary Institute. Since all the slaughtering of animals is carried on at the two municipal slaughter-houses, there is no difficulty in securing an efficient inspection of meat before it is sold for human consumption.

Mr. G. M. McGregor, Certificated Inspector of Meat and Other Foods, who was formerly a butcher, acts in the capacity of Inspector of Meat and Other Foods in shops, markets and wholesale stores within the City, and assists in the inspection of meat at the slaughter-houses.

In connection with meat inspection, the facilities provided at the Public Health Laboratory are utilized for the purpose of diagnosis.

In the following tabular statements particulars are given with reference to diseased or unsound food dealt with during the past year.

TABLE XXXIII.

Animals slaughtered at the Municipal Slaughter-houses during the year 1920 :—

	Roth Abattoir	Canton Abattoir	Totals
Cattle ...	11,704	590	12,294
Sheep and Lambs ...	40,721	3,882	44,603
Calves ...	10,910	484	11,394
Pigs ...	12,531	1,236	13,767
Totals ...	75,866	6,192	82,058

TABLE XXXIV.

Unsound carcasses of meat surrendered at Abattoirs and destroyed by arrangement with the owners:—

Place	Carcasses of				Totals
	Beef	Mutton and Lamb	Veal	Pork	
Roath Abattoir	148	81	37	15	281
Canton Abattoir	1	3	8	1	13
Totals	149	84	45	16	294

Causes of destruction of carcasses:—

Cause	Beef	Mutton and Lamb	Veal	Pork	Totals
Actinomycosis	1	...	...	...	1
Congestion ... ..	...	...	2	...	2
Decomposition ... ..	...	18	...	...	18
Dropsy	3	6	...	...	9
Dropsy and Emaciation	7	24	1	...	32
Emaciation	7	9	...	...	16
Found Dead	2	15	4	...	21
Joint-ill and Omphylitis ... ..	...	...	1	...	1
Jaundice ... ..	...	...	5	...	5
Johnes' Disease	3	...	1	...	4
Moribund ... ..	...	4	...	1	5
Pneumonia (Systic) ... ..	...	1	...	...	1
Pyæmia	2	2	1	1	6
Prematurity ... ..	...	...	1	...	1
Rheumatism ... ..	...	...	...	5	5
Metritis (Septic)	2	...	...	...	2
Septic Pleurisy	1	...	...	1	2
Neoplasms ... ..	...	2	...	...	2
Traumatism	2	...	2	1	5
Tuberculosis	108	...	3	30	141
Lymphadinoma	1	...	...	...	1
Metritis	1	...	...	...	1
Contamination ... ..	...	1	...	...	1
Inflammation ... ..	...	...	...	1	1
Asphyxiation ... ..	...	1	...	...	1
Total	140	83	21	40	284

TABLE XXXV.

Approximate weight of diseased or unsound meat surrendered at Abattoirs and destroyed by arrangement with the owners :—

	Whole Carcases	Part Carcases	Offals	Totals
	tons cwt. lbs.	tons cwt. lbs.	tons cwt. lbs.	tons cwt. lbs.
Beef	32 4 62	4 5 66	25 7 102	61 18 6
Veal	17 1	45	4 82	1 2 16
Mutton and Lamb	1 9 62	4 10	18 9	2 11 81
Pork	2 2 55	9 0	1 5 29	3 16 84
Totals	36 13 68	4 19 9	27 15 110	69 8 75

TABLE XXXVI.

Approximate weight of diseased or unsound food surrendered at shops and stores and destroyed or otherwise dealt with by arrangement with the owners :—

	tons cwt. lbs.
Beef	1 16 0
Veal, etc.	1 40
Mutton and Lamb, etc.	1 16 21
Pork, etc.	4 89
Margarine	4 22
Rabbits	1 3 63
Fish	10 19 81
Provisions	2 5 98
Vegetables	11 0 19
Fruit	9 19 1
Pigs' Fry	12 78
Bacon	5 0 15
Poultry	13 0
Offal	1 12 90
Total	47 9 57

TABLE XXXVII.

Approximate weight of diseased or unsound food destroyed or otherwise dealt with, either by the consent of the owners, or by Magistrates' Orders, in each year since 1896 :—

Year.	Food.	Year.	Food.
	tons cwt. lbs.		tons cwt. lbs.
1896	1 14 88	1909	73 6 12
1897	4 16 72	1910	76 12 8
1898	4 8 73	1911	90 17 80
1899	6 6 93	1912	105 18 70
1900	9 9 49	1913	77 11 39
1901	15 0 96	1914	52 0 12½
1902	19 9 107	1915	83 14 17½
1903	18 12 46	1916	109 17 28
1904	18 11 54	1917	35 5 15
1905	18 7 108	1918	67 10 100
1906	21 16 77	1919	179 7 91
1907	24 3 84	1920	47 9 57
1908	65 4 54		

TABLE XXXVIII.

Number of animals slaughtered and the number and proportion per cent. condemned at the Municipal Slaughter-houses during each of the years 1902 to 1920 :—

Year	Number of Animals Slaughtered	Number of Animals Condemned	Per cent. Condemned
1902	85,046	75	0.09
1903	81,258	77	0.09
1904	85,704	88	0.10
1905	80,558	84	0.10
1906	77,583	108	0.14
1907	79,733	90	0.11
1908	81,496	110	0.13
1909	87,438	117	0.13
1910	81,539	124	0.15
1911	81,898	149	0.18
1912	79,263	174	0.22
1913	74,845	167	0.22
1914	73,209	169	0.23
1915	85,343	257	0.30
1916	95,738	346	0.36
1917	103,208	247	0.23
1918	73,763	144	0.19
1919	89,122	217	0.24
1920	82,060	284	0.34

SALE OF FOOD AND DRUGS ACTS.—Samples submitted for analysis during the year 1920, to the Public Analyst, Mr. Thomas Hughes, F.I.C. :—

TABLE XXXIX.

Description	Number Analysed	Genuine	Adulterated
Arrowroot	6	6	...
Butter	24	24	...
„ (Informal)	16	16	...
Baking Powder	9	9	...
Beer	6	6	...
Coffee	6	6	...
Cornflour	9	9	...
Ground Ginger	3	3	...
Golden Syrup	6	6	...
Lard	6	6	...
Milk	504	489	15
„ (Skimmed)	7	7	...
Margarine	3	3	...
„ (Informal)	8	8	...
Pepper	9	9	...
Raw Cream	7	3	4
„ „ (Informal)	33	25	8
Self-Raising Flour	9	9	...
Vinegar	6	6	...
Totals	677	650	27

TABLE XL.

Legal Proceedings under the Sale of Food and Drugs Acts :—

No. of Sample	Description	Adulteration	Fines	Remarks
842	Milk	6.0% deficient in fat ... ..	...	Dismissed on Warranty
62	"	7.6% added water	£2	Two defendants
62	"	Do. do.	£2	
83	"	10.0% deficient in fat ... ..	...	Case dismissed
98	"	24.7% added water ... ..	...	Case dismissed
		Refusing to sell	£5	
		Margarine not marked	£2	
		Do. do.	£2	
		Do. do.	£2	
287	"	5.5% added water	£10	
288	"	10.0 added water, and		
		5.0% deficient in fat	£10	
		Refusing to sell	£2	
301	"	6.0% deficient in fat ... ..	...	Dismissed
346	"	9.0% deficient in fat ... ..	...	Dismissed
		Refusing to sell	10/-	
456	"	15.7% deficient in fat	£2	
470	"	15.3% deficient in fat ... ..	...	Dismissed
		False Warranty	£5 and costs	
577	"	16.3% deficient in fat	16/- costs	
		Margarine not marked ... ..	...	Case withdrawn
		Do. "	5/- costs	
		Do. "	10/- costs	
		Do. "	10/- costs	
607	"	18.3% deficient in fat ... ..	...	Case dismissed
488	"	3.9% added water	5/- and costs	
		Do. do.	5/- and costs	
		Refusing to sell ... ..	...	Case dismissed

TABLE XLI.

In the following cases Legal Proceedings were not taken :—

No. of Sample	Description	Adulteration	Remarks
261	Milk	2.0 % added water	Proceedings not recommended
394	"	Do. do.	Do. do. do. "
462	"	Do. do.	Do. do. do. "

Legal Proceedings are not taken in cases of Milk in which the percentage of adulteration is very small.

TABLE XLII.

Samples of milk analysed and proportion adulterated :—

	Samples Analysed	SAMPLES ADULTERATED					
		Number	Per-centage	Added Water	Deficient Fat	Added Water and Deficient Fat	Preserv-atives
WHOLESALE—							
Taken at Railway Stations	72	1	1.3	...	1	...	...
RETAIL—							
Taken in shops, from carts, etc.	439	14	3.1	7	6	1	...
Totals	511	15	2.9	7	7	1	...

FACTORY AND WORKSHOP ACT, 1901.—Under Section 132 of the Factory and Workshop Act, 1901, the Medical Officer of Health is required in his annual report to deal specifically with the administration of the Act (so far as the matters under the charge of the Sanitary Authority are concerned), and to send a copy of this report to the Secretary of State.

The Inspectors of Workshops made altogether 3,241 visits of inspection to factories, workshops, etc., during the year. 367 notices regarding nuisances or sanitary defects were served, and 362 notices were complied with. Details of the work carried out under the Act are set forth in Tables to in this Report.

TABLE XLIII.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

PREMISES.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	797	114	...
Workshops (including Workshop Laundries)	1,612	208	...
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	349	45	...
Total	2,758	367	...

TABLE XLIV.—con.

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

PARTICULARS.	Number of Defects		
	Found.	Remedied.	
Nuisances under the Public Health Acts :—			
Want of Cleanliness	134	112	
Want of Ventilation	8	3	
Overcrowding ... ..	...	...
Other nuisances	168	171	
Sanitary accommodation ... {	insufficient	26	18
	unsuitable or defective	72	60
	not separate for sexes	2	...
Breach of special sanitary requirements for bakehouses (Sec. 97 to 100) ... ..	...	...
Total	410	364	

In the foregoing table, where the number of defects remedied exceed those found, the defects were found in 1919, and remedied in 1920.

3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.							OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.		OUTWORK IN INFECTED PREMISES, Sections 109, 110.	
	Lists received from Employers						Notices served on Occupiers as to keeping or sending lists.				
	Sending twice in the year			Sending once in the year.				Instances.	Notices served.	Instances.	Orders made (S. 110).
	Lists	Con-tractors	Work-men.	Lists.	Con-tractors	Work-men.					
Wearing Apparel—											
(1) making, etc. ...	70	...	206	6	...	72	41	3	3	7	...
(2) cleaning & washing	...	...	...	...	...	...	...	...	...	...	...

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the Year.	Number.
Bakers	148
Bootmakers	122
Dressmakers and Milliners	167
Laundries	41
Tailors	127
Miscellaneous	653
Total number of Workshops on Register ...	1,258

TABLE XLIV.—con.

5.—OTHER MATTERS.

Class	Number
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (Sec. 133) ...	...
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts but not under the Factory Act :—	
Notified by H.M. Inspector	12
Reports (of action taken) sent to H.M. Inspector	17
Other (Notices of Occupation of Workshops received from H.M. Inspector) ...	90
Underground Bakehouses in use at the end of the year	1

TABLE XLV.

Factories and workshops on the registers at the end of the year 1920, the number of inspections made, and the number of notices served during the year :—

	Number on Registers	Number of Inspections	Number of Notices Served
WORKSHOPS :—			
Bakers	148	559	61
Bootmakers	122	112	22
Dressmakers and Milliners	167	253	20
Laundries	41	55	6
Tailors	127	193	31
Miscellaneous	653	495	60
DOMESTIC WORKSHOPS :—			
Bootmakers	59	3	1
Dressmakers and Milliners	39	9	1
Laundries	2	...	...
Tailors	15	156	2
Miscellaneous	36	7	4
WORKPLACES :—			
Miscellaneous	206	349	45
OUTWORKERS' PREMISES :—			
Tailors	209	79	3
Miscellaneous	15	...	...
FACTORIES :—			
Bakers	24	127	9
Bootmakers	25	13	...
Laundries	18	34	4
Miscellaneous	460	797	101
Totals	2,366	3,241	370

TABLE XLVI.

NUISANCES IN FACTORIES, WORKSHOPS, &c., DURING THE YEAR 1920

	Bakehouses		Bootmakers' Premises.		Dressmakers' and Milliners' Premises.		Laundries.		Tailors' Premises.		Outworkers' Premises.		Miscellaneous.		Totals.	
	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied
Want of Cleanliness ...	58	46	5	4	4	3	2	1	7	4	1	...	57	54	134	112
Want of Ventilation ...	...	...	...	...	...	...	...	...	3	3	2	...	3	...	8	3
Overcrowding ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Want of drainage of floors	...	1	1	...	...	...	1	...	4	1	...	...	...	...	...	...
Sanitary Accommodation { Insufficient	...	...	...	...	...	...	...	...	4	5	...	...	65	52	72	60
Unsuitable or defective	1	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...
moderation { Not separate for sexes	...	...	...	...	...	...	...	...	...	...	...	...	19	22	28	35
Defective or choked drains	...	4	1	3	...	...	1	1	6	5	1	...	...	...	...	...
Defective syphon traps	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Defective gully traps	1	1	...	...	...	...	...	...	...	...	...	...	4	8	4	8
Want of flushing apparatus	...	2	...	...	4	3	...	...	3	3	...	...	15	12	22	20
Defective flushing apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	2
Defective yard surfaces	...	...	...	...	1	...	...	1	...	2	...	...	11	17	19	24
Offensive accumulations	1	2	2	2	...	...	...	1	5	2	...	...	...	...	...	...
Want of manure receptacles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Defective manure receptacles	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other nuisances ...	7	12	12	12	8	7	5	4	10	7	1	1	49	55	92	80
Totals ...	69	69	21	21	21	18	9	8	42	30	5	1	244	235	410	364

SHOPS ACTS, 1912 and 1913.—The Shops Act, 1912, which came into operation on 1st May, 1912, repealed the Shops Regulation Acts, 1892–1911. It re-produces without change of substance the provisions of previous Acts dealing with Shops, from the Shop Hours Act, 1892, down to and including the Shops Act, 1911. Amongst other provisions, the Act provides that every shop-assistant must be allowed a half-holiday, and must be given intervals for meals and rest. The hours of employment of young persons under 18 years of age are regulated under the Act. Provision is also made requiring employers to provide seats for female shop assistants. Shop-keepers are required to close their shops at 1 p.m. on one week-day in every week, unless it is exempted on one of the grounds mentioned in the Act. The local authority have power to make an Order for any class of shop with the consent of the occupiers of two-thirds of the shops of the class, fixing the hour on each day of the week (other than the half-holiday) at which the shops are to close; the hour fixed must not be earlier than 7 p.m. Such Closing Orders cannot, however, apply to certain classes of business which are exempt. The Shops Act, 1913, alters the provisions of the Act of 1912 with reference to the meal times and half-holidays of assistants employed in the sale of refreshments without reducing the time to be set apart for such meal times and half-holidays.

TABLE XLVII.

Closing Orders fixing the closing time of shops in operation in Cardiff, and number of inspections and infringements thereunder during the year 1920 :—

No of Order	Trade	Area	Inspections	Infringements
1	Barbers	Whole City ... ..	...	...
2	Bootmakers	Grangetown	2	...
3	Bootsellers	Central Area	51	2
4	„	Roath, Cathays and Park	109	...
5	„	Riverside and Canton ...	101	1
6	Goldsmiths, etc.	Central Area	55	1
7	Pawnbrokers ... ..	„ „ ... ..	...	...
8	Goldsmiths, Pawnbrokers, etc. ...	Whole of City, except Central	11	...
9	General and Fancy Drapers, Milliners, etc.	East of Taff Vale and Rhymney Railways ...	112	...
10	Toys or Fancy Goods	Central Area ... ..	...	...
11	Pharmacists, Chemists, and Druggists	Whole of City, except South	44	1
12	Ironmongers, Iron and Steel Sellers, etc.	Park Ward	29	...
13	Hay, Corn, Seed Merchants, etc. ...	Whole City	153	...
14	Bespoke Tailors	Central Area	51	1
15	Hairdressers	Whole City	169	1
		Totals	887	7

Other inspections and infringements under the Shops Act, 1912, during the year 1920 :—

Number of Shops visited	8,486
Number of observations of shops	2,845

Infringements with reference to :—

Assistants' meal times	—
Assistants' half-holiday	100
Employment of young persons	50
Seats for female shop-assistants	—
Closing of shops for weekly half-holiday	99

Most of the above infringements were in connection with notices which shop-keepers are required to affix in the interior and on the exterior of their shops.

TABLE XLVIII.

SUMMARY OF LEGAL PROCEEDINGS.

Proceedings taken under	Number	Fined	Cau- tioned	To pay Costs only	Dis- missed	With- drawn	Amount of Fines
Sale of Foods and Drugs Acts ...	24	10	...	6	7	1	£45 1s. 0d. including costs
Shop Hours Acts	4	1	2	1	...	...	10/-
Public Health Acts, 1875, Secs. 79 and 95	7	1	...	...	...	6	£5
Merchant Shipping Act	8	4	2	1	1	...	£5 15s. 0d.
Totals	43	16	4	8	8	7	£56 6s. 0d.

DISINFECTING STATION, CLEANSING STATION, and MORTUARY.— The Disinfecting and Cleansing Station is situated on land adjacent to the Mortuary, in Crawshay Lane, Penarth Road.

The accommodation of the Cleansing Department comprises separate baths and rooms for males and females. Each side contains a bath-room, waiting-room, and dressing-room, with all the necessary appliances.

The Cleansing of Persons Act, 1897, permits Sanitary Authorities to provide Cleansing Stations and apparatus for cleansing verminous persons and their garments free of charge, upon the application of such persons. The Children Act provides that where the Sanitary Authority has made this provision, the Education Authority may avail themselves of it for enforcing the requirement as to the compulsory cleansing of verminous school children.

The cleansing of school children, when necessary, is done by School Nurses. During the year 1920, the number of children cleansed at the Cleansing Station amounted to 124, suffering from scabies. In all cases the children's bedding and clothes were disinfected, and the rooms occupied by them were also cleansed and disinfected by the Disinfectors.

Infected premises are disinfected either by fumigation with sulphur dioxide, formaldehyde, or by means of a spray of formalin. Articles of clothing and bedding are removed from the house in which the infectious disease occurred to the Disinfecting Station, and submitted to disinfection by saturated steam in a Washington Lyon's high pressure steam disinfecting apparatus.

During the year the routine disinfection comprised the following :—

Houses disinfected	1,919
Articles of bedding, clothing, etc., disinfected	11,200
" " " " destroyed	28

The number of bodies removed to the Mortuary during the year was 75 (68 males and 7 females). The number of post-mortem examinations performed was 30.

INFANT MORTALITY.—The rate of infant mortality in Cardiff in the year 1920, calculated in the proportion of deaths under one year of age to 1,000 births registered, was at the rate of 84, compared with 94 in the year 1919, and with 107, the average rate for the ten years 1910–1919.

Rates of infant mortality throughout the country, as compared with that of Cardiff during 1920 :—

						Deaths under 1 year per 1,000 births.
England and Wales	...	...	...	...	...	80
96 Great Towns ...	...	...	...	...	...	85
148 Smaller Towns	...	...	...	...	...	80
CARDIFF	...	...	...	...	...	84

TABLE XLIX.

The following table shows the rates of infant mortality in the several municipal wards, the highest rate in each year being underlined :—

	Deaths under one year per 1,000 births.									
	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Cardiff (Whole District) ...	135	110	115	109	106	89	99	102	94	84
Roath Ward ...	135	88	93	79	89	102	87	93	50	76
Park „ ...	117	60	100	99	83	69	90	91	110	78
Splott „ ...	152	93	111	160	73	80	71	104	68	84
Central „ ...	160	199	136	113	155	212	123	147	139	116
South „ ...	213	129	121	119	116	94	151	134	121	146
Cathays „ ...	120	107	125	90	124	83	101	94	96	55
Adamsdown Ward ...	117	126	129	140	132	122	106	130	111	87
Riverside „ ...	132	80	77	77	75	74	98	83	109	78
Canton „ ...	120	115	107	100	95	51	80	89	88	79
Grangetown „ ...	132	142	143	117	139	100	115	100	98	85

TABLE L.

The chief causes of death amongst infants under one year of age in Cardiff during the years 1911–1920 are shewn in the following table :—

Cause of Death.	Deaths under one year of age.									
	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Premature Birth ...	97	91	115	99	95	65	68	62	62	91
Diarrhoea and Enteritis	201	44	125	88	88	63	44	64	53	38
Pneumonia ...	39	59	38	46	43	44	49	52	46	54
Bronchitis ...	26	53	40	31	33	21	48	29	34	46
Whooping Cough	32	22	9	30	21	15	19	6	16	7
Tuberculosis (all forms)	25	15	20	18	23	18	5	10	9	6
Atrophy and Debility	57	60	73	63	58	51	40	48	41	71
Convulsions ...	41	31	42	32	26	31	14	25	24	30
Measles ...	1	42	2	8	10	5	4	14	...	15
Congenital Defects ...	20	15	13	18	15	13	11	9	10	6

TABLE LI.

Deaths and death-rate per 1,000 births from Diarrhoea and Enteritis (under 2 years) :—

	Number of Deaths	Death-rate per 1,000 births	Death-rate per 1,000 births, 1910-1919 (average)
Diarrhoea and Enteritis (under 2 years) ...	41	7.9	21.8

TABLE LII.

INFANT MORTALITY FOR THE YEAR 1920.

	0-1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	4 wks. to 3 mths.	3-6 mths.	6-9 mths.	9-12 mths.	Total
Deaths	112	18	29	21	180	75	76	53	47	431
Percentage to total deaths under 1 year	25.9	4.1	6.7	4.8	41.7	17.4	17.6	12.2	10.9	...

A reference to Table XLIX. and to the map in this report, shows that the incidence of infant mortality falls heavily upon the Central and the South Wards, and particularly upon area A in the map, this area being situated for the most part in these wards. This fact is of some significance, as it will be seen that the general death-rate, and the rates of mortality from Pulmonary Tuberculosis, Diarrhoea and Enteritis, Bronchitis and Pneumonia are relatively high in this area, which may be termed a congested area, or one in which the density of population is also relatively high. The conditions under which many of the people live in this district are therefore unwholesome, and are such as one might expect to give rise to ill-health and high mortality, especially amongst infants and young children, who are more sensitive than adults to the influence of insanitary surroundings. There is evidence that in this central district, overcrowding, both in persons in houses, and of houses in the area exists, a condition which invariably leads to a general deterioration in the health of those who are subject to an unfavourable environment of this kind. There is no evidence of any serious structural defect in the individual houses in this area, it is doubtful if any of them could be closed as unfit for habitation, but they are, for the most part, inhabited by a poor class of people, who are not sufficiently alive to the advantages of cleanliness, ventilation, and suitable food. It is for the benefit of districts such as these that our Maternity and Child Welfare Centres, our Ante-Natal Clinics, School Clinics, and Tuberculosis Institutes, have been established.

NOTIFICATION OF BIRTHS ACT, 1907.—This Act, which was adopted in 1908, provides for the notification to the Medical Officer of Health of every birth within the City by the father, if residing in the house where the birth takes place, and by any person in attendance upon the mother at the time of, or within six hours after, the birth. The notification must be given to the Medical Officer of Health within thirty-six hours after birth.

The following Table gives the number of births notified under this Act in each quarter of the year 1920, together with the number of still-births notified.

TABLE LIII.

1920	Births notified by Midwives	Births notified by Doctors or Parents	Duplicate Notifications received	Actual Number of Births notified	Still-births notified
1st Quarter ...	1,366	40	13	1,406	91
2nd „ ...	1,350	47	11	1,397	54
3rd „ ...	1,235	40	14	1,275	60
4th „ ...	1,246	40	4	1,286	67
Totals ...	5,197	167	42	5,364	272

Births notified during the year 1920 5,364

Births registered during the year 1920 5,259

MATERNITY AND CHILD WELFARE.

There are now five centres in connection with this work in various wards of the City. Altogether, there are ten “consultations” for children up to 5 years of age held each week, and two “consultations” for expectant mothers. The greater number of children who are brought to these “consultations” are under two years of age. The mothers receive instruction in the feeding and management of their children and in general hygiene. The children are weighed and records of their progress are kept. A doctor is in attendance at the “consultations,” and every child attending for the first time, is medically examined, and at intervals during their subsequent attendances. An arrangement has been made with King Edward VII. Hospital to receive as in-patients, such children from the “consultations” as require hospital treatment. Each patient who attends the Ante-Natal Clinic is examined by the doctor in attendance at the Clinic. Complicated cases are referred to the Maternity Department of King Edward VII. Hospital, with which an arrangement has been made to receive those patients. At these Clinics, instruction is given in cutting out and making baby clothes.

MATERNITY AND CHILD WELFARE CENTRES.

- I.—CITY HALL.—Two infant consultations weekly. One ante-natal consultation.
- II.—SPLOTT CENTRE.—St. Saviour's Schools, Splott Road.—Two infant consultations weekly. First opened April 3rd, 1919, on one afternoon each week, and from July 1st, 1919, for two afternoons each week.
- III.—GRANGETOWN CENTRE.—The Y.M.C.A. Hall. Two infant consultations weekly. First opened on April 14th, 1919, on one afternoon each week, and from July 16th, on two afternoons weekly.
- IV.—CANTON CENTRE.—The Free Library. Two infant consultations weekly. First opened on June 27th, 1919, on one afternoon each week, and from April 29th, 1920, on two afternoons weekly.
- V.—ADAMSDOWN CENTRE.—10, Glossop Terrace. One infant consultation weekly. One ante-natal consultation. Opened since June 16th, 1920.

STAFF.—MEDICAL OFFICERS—One full-time Medical Officer (Dr. E. Creaser). Two part-time women Medical Officers. These two latter posts are filled by Dr. E. Stansfeld, who was appointed December, 1919, and Dr. M. I. Adams, appointed in March, 1920.

HEALTH VISITORS.—There are altogether ten Health Visitors. The Chief Health Visitor, Mrs. Huntley, acts as Inspector of Midwives, and assists in the supervision of the work of the other nine. The clerical work is undertaken by a woman clerk (Miss C. Williams) who is also qualified as a Health Visitor.

ANTE-NATAL CLINICS.—During the year 1920, 91 Clinics were held. The number of patients who attended these Clinics was 298, of these 260 were new cases, and 38 were old attenders. The total number of attendances was 571, making an average of 6.2 per clinic.

THE MILK (MOTHERS' AND CHILDREN) ORDER, 1919.—Under this Order, milk is supplied free or at less than cost price to expectant and nursing mothers, and children under five years in cases approved by the Maternity and Child Welfare Committee, and recommended by the Medical Officer in charge of the Centres. In each case the home of the applicant is visited, and thorough investigation is made into the earnings of the family, and the statements of income are sent to the employer for verification.

INFANT CONSULTATIONS.—The individual babies under observation at the "Infant Consultation" and the attendances during the year 1920 were as follows :—

				No. of New Attenders.	No. of Attendances.
1st Quarter	...	...	...	926	6,418
2nd "	...	...	...	776	6,279
3rd "	...	...	...	771	6,942
4th "	...	...	...	605	6,747

Altogether, 4,332 babies attended the "Consultations" during the year 1920, of these 3,220 were regular attendants, and 1,112 casual visitors. Four hundred and ten "Consultations" were held during the year with a total number of 26,386 attendances. The average attendance at each "Consultation" was 64.

The deaths among the infants attending the "Consultation" were as follows :—

1920.		Under 12 months.	Over 12 months.	Total.
1st Quarter	...	34	15	49
2nd "	...	13	14	27
3rd "	...	16	5	21
4th "	...	29	9	38
		92	43	135

The ages at death and causes of death amongst the 92 children under one year of age were as follows :—

Ages.	Number.	Cause of Death.
Under 1 week	0	
1—2 weeks	0	
2—3 "	1	Pneumonia.
3—4 "	0	
4 weeks to 3 months	15	2 convulsions, 1 gastric catarrh, 1 premature birth, 1 cardiac syncope, 1 infective enteritis, 1 gastro enteritis, 3 bronchitis, 1 broncho-pneumonia, 2 pneumonia, 1 congenital syphilis, 1 whooping cough.

Ages.	Number.	Cause of Death.
3—6 months ...	29 ...	1 measles, 2 convulsions, 3 marasmus, 4 gastritis, 1 premature birth, 1 eczema, 1 gastro catarrh, 1 rickets, 5 broncho-pneumonia, 5 bronchitis, 1 accidental suffocation, 2 enteritis, 1 infective enteritis, 1 meningitis.
6—9 „ ...	24 ...	1 marasmus, 3 zymotic enteritis, 1 convulsions, 4 infective enteritis, 1 intussusception, 8 broncho-pneumonia, 1 tabes mesenterica, 1 whooping cough, 1 gastritis, 1 pneumonia, 2 bronchitis.
9—12 „ ...	21 ...	1 tabes mesenterica, 2 convulsions, 2 broncho-pneumonia, 3 pneumonia, 3 infective enteritis, 1 infantile paralysis, 1 shock from burns, 5 measles, 3 bronchitis.

The Health Visitors paid a large number of visits to the homes of those mothers who most required and desired instruction from them. There were 18,863 visits paid in connection with Child Welfare, the number of infants visited within four weeks of their birth being 4,669.

PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1914.

By this Order of the Local Government Board, Ophthalmia Neonatorum became compulsorily notifiable by Medical Practitioners and Certified Midwives on the 1st April, 1914.

During the year 1920, 66 notifications were received. Eight of these were duplicate notifications, making a total of 58 cases notified, as follows :—

Cases notified by Medical Practitioners	...	...	27
„ „ Medical Practitioners and Midwives...			8
„ „ Midwives	...	...	23
Total number of Cases	...	...	58

A Medical Practitioner was in attendance at the birth in	12 cases.
A Certified Midwife was in attendance in	46 „
	58

Results in 58 cases notified were :—

Complete recovery	...	...	...	56
Result not obtained (left the district)	...	...	...	2
Opacity in one eye	...	...	...	...
Opacities in both eyes	...	...	...	...
				58

When the notification of a case is received, the infant is visited immediately by a Health Visitor, and if a doctor is not already in attendance she urges the parents to obtain medical advice without delay—the case is then visited from time to time to see that the medical instructions are carried out.

An arrangement has been made with the Queen Victoria Jubilee Nurses' Institute for their nurses to assist in the carrying out of the treatment prescribed by the Medical practitioners.

MIDWIVES ACT, 1902.—This Act has now been in operation since the 1st April, 1903, and is administered locally by the Health and Port Sanitary Committee, with the Medical Officer of Health as Executive Officer. The Act provides for the education of midwives, and for the certification and enrolment of women qualified to act in that capacity. No person can now habitually act as a midwife, otherwise than under the direction of a qualified medical practitioner, unless she is certified under this Act. The Certificate of the Central Midwives Board can only be obtained after the training specified in the Rules of the Board, and after passing the Board's Examination. A certain number of Midwives were, however, placed on the roll of Midwives and certified in virtue of their having been in practice before the passing of the Act.

The following Table gives information relating to the administration of the Midwives Act during the year 1920 :—

Number of Midwives on Roll for 1920	...	...	107
Qualifications of Certified Midwives :—			
Bona fide	...	...	37
Certificate of London Obstetrical Society	...	...	6
Certificate of Central Midwives Board	...	..	64
Total	...	...	107
Records of sending for medical help received from Midwives :—			
In the case of the Mother	...	...	324
In the case of the Child	...	...	91
Total	...	...	415
Still-births notified by Midwives	...	...	272
Still-births attended by Midwives without medical practitioner	...	...	111
Cases of Puerperal Fever attended by Midwives	...	...	7
Number of Visits to Midwives	...	...	242
Number of Midwives visited	...	...	96
Number of Midwives inspected	...	...	77

I have the honour to be,

My Lord Mayor and Gentlemen,

Your obedient Servant,

EDWARD WALFORD,

Medical Officer of Health.

APPENDIX.

CITY OF CARDIFF.

TABLE I.

CAUSES OF AND AGES AT DEATH DURING THE YEAR 1920.

CAUSES OF DEATH.	NET DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
	ALL AGES.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
All causes { Certified ...	2,411	431	76	91	98	156	379	599	581	762
{ Uncertified ...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	5	...	...	...	...	3	1	1	...	5
Small-pox ...	...	...	...	...	...	...	...	...	...	...
Measles ...	63	15	20	25	3	...	...	...	...	...
Scarlet Fever ...	18	...	1	5	8	1	3	..	...	12
Whooping Cough ...	22	7	5	9	1	...	...	...	...	1
Diphtheria and Croup ...	23	3	3	9	8	...	...	...	...	18
Influenza ...	24	1	1	1	2	2	6	7	4	2
Erysipelas ...	2	...	...	...	...	1	...	1	...	1
Phthisis (Pulmonary Tuberculosis) ...	262	1	...	2	11	68	120	55	5	81
Tuberculous Meningitis ...	19	1	3	4	5	2	3	1	...	4
Other Tuberculous Diseases ...	31	4	1	2	1	8	11	3	1	10
Cancer, malignant disease ...	202	...	...	...	...	2	20	106	74	72
Rheumatic Fever ...	10	...	...	1	6	...	2	1	...	1
Meningitis ...	11	5	1	...	1	2	1	1	...	2
Organic Heart Disease ...	240	..	1	...	7	5	27	98	102	51
Bronchitis ...	173	46	6	4	2	1	8	42	64	31
Pneumonia (all forms) ...	183	54	23	10	7	9	34	23	23	45
Other diseases of										
Respiratory organs ...	44	3	2	4	2	1	7	16	9	9
Diarrhoea and Enteritis ...	42	38	3	...	...	...	..	1	..	2
Appendicitis and Typhlitis ...	7	...	...	..	1	3	1	2	...	13
Cirrhosis of Liver ...	6	..	...	...	..	..	...	6	...	...
Alcoholism ...	1	...	...	...	...	..	...	1	...	...
Nephritis and Bright's Disease ...	66	1	...	3	2	3	11	27	19	22
Puerperal Fever ...	1	...	...	...	...	..	1	...	...	..
Other accidents and diseases of Pregnancy and Parturition ...	18	..	...	...	..	3	15	..	..	17
Congenital Debility and Malformation, including Premature Birth ...	169	169	...	..	...	...	...	...	...	34
Violent Deaths, excluding Suicide ...	100	7	1	6	12	16	29	20	9	57
Suicide ...	9	...	...	...	...	1	4	3	1	2
Other Defined Diseases ...	641	74	5	5	18	23	75	174	267	262
Diseases ill-defined or unknown ...	19	2	...	1	1	2	...	10	3	8
Totals ...	2,411	431	76	91	98	156	379	599	581	762
Sub-entries (included in above figures)—										
Cerebro-spinal Meningitis	1	...	...	...	1	...	...	...	...	...
Broncho-Pneumonia ...	94	40	17	10	3	4	6	4	10	...
Encephalitis Lethargica	2	...	...	...	...	1	...	1	...	...

TABLE II.
INFANT MORTALITY DURING THE YEAR 1920.
NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE

CAUSE OF DEATH.			Under 1 week	1-5 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks.	4 weeks and under 3 months	3 months and under 6 months	6 months and under 9 months	9 months and under 12 months	Total Deaths under 1 year
All causes	Certified ...	...	112	18	29	21	180	75	76	53	47	431
	Uncertified	...	...	...	...	...	...	...	...	...	...	...
<hr/>												
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	1	1	...	1	3	10	15
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	...	2	1	3	1	7
Diphtheria and Croup	...	...	...	...	...	...	...	...	1	...	2	3
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	2	2
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	1	...	1	2
Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	2	...	2
Meningitis (not Tuberculous)	...	...	1	...	...	...	1	1	2	...	...	4
Convulsions	...	...	5	1	3	2	11	8	5	3	3	30
Laryngitis	...	...	...	...	...	...	...	...	1	...	1	2
Bronchitis	...	...	...	1	2	3	6	13	14	8	5	46
Pneumonia (all forms)	...	...	...	...	...	2	2	7	15	17	13	54
Diarrhoea	...	...	...	1	1	...	2	4	4	4	...	14
Enteritis	...	...	...	...	2	...	2	5	7	6	4	24
Gastritis	...	...	...	...	...	...	...	1	6	1	...	8
Syphilis	...	...	...	1	1	1	3	6	1	...	...	10
Rickets	...	...	...	...	...	...	...	...	1	...	...	1
Suffocation, overlying	...	...	3	...	...	...	3	1	1	...	1	6
Injury at birth	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	...	...	5	...	...	...	5	1	...	...	...	6
Congenital Malformations	...	...	3	1	1	...	5	1	...	...	...	6
Premature Birth	...	...	64	6	5	7	82	9	...	...	...	91
Atrophy, Debility and Marasmus	26	6	12	4	48	11	10	1	1	71
Other Causes	6	...	2	1	9	5	5	5	3	27
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Totals	112	18	29	21	180	75	76	53	47	431

Nett Births in the year { legitimate, 4,959.
 { illegitimate, 176.

Nett Deaths in the year of { legitimate infants, 398.
 { illegitimate infants, 33.

TABLE III.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1920.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.							TOTAL CASES NOTIFIED IN EACH LOCALITY.				TOTAL CASES REMOVED TO HOSPITAL.
	At all Ages.	At Ages—Years.						East Cardiff Regis. Sub-Dist.	Central Cardiff Regis. Sub-Dist.	West Cardiff Regis. Sub-Dist.		
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.				65 and upwards.	
Small Pox ... ..	...	...	...	..	..	...	...	...	..	...	...
Diphtheria, including Membranous Croup ...	366	2	75	219	43	22	5	122	119	125	272	
Erysipelas	68	2	1	7	9	22	24	28	16	24	...	
Scarlet Fever	1,351	10	279	893	112	49	8	558	323	470	958	
Enteric Fever	5	...	...	...	2	1	2	1	2	2	4
Puerperal Fever	7	..	...	...	2	5	..	1	4	2	...
Cerebro-Spinal Fever	4	...	...	3	1	...	...	1	1	2	3
Ophthalmia Neonatorum...	57	56	1	...	..	...	...	15	18	24	...
Polionyelitis	2	2	...	...	...	...	...	1	...	1	...
Encephalitis Lethargica ...	7	...	1	1	2	...	3	3	3	1	...	
Influenzal Pneumonia, etc. ...	139	4	26	30	17	42	11	66	35	38	...	
Malaria	11	...	...	...	3	8	...	3	4	4	...
Pulmonary Tuberculosis ...	275	...	...	9	85	137	38	79	90	106	...
Other Forms of Tuberculosis ...	79	1	15	23	22	16	2	19	37	23	...	
TOTALS	2,371	77	398	1,185	298	302	93	897	652	822	1,237	